

that by a manifest Contradiction, he gives to understand, that the Council which has condemned *Amalarius*, and *Amalarius* condemn'd by the Council, were in the same Sentiment, and equally contrary to the Doctrine of *Paschasius* on the Subject of the *Eucharist*. But leaving that Thought which they pretend destroys itself; they say of the other Opinions, that that of *Ussher*, who says that the Error of *Amalarius* consisted in the Doctrine of the Catholics, is entirely false; not only because that Supposition is without Foundation, but likewise because the Epitome of *William of Malmesbury* joins *Amalarius* to *Heribaldus* and *Rabanus*, who were *Paschasius's* Adversaries: That it is equally false, that *Amalarius*, *Heribaldus* and *Rabanus*, were of the Opinion of the Sacramentarians, as *Aubertin* pretends, since *William of Malmesbury*, and *Thomas Waldensis* maintain, that those three Authors have been in the Error of the *Stercoranistes*, who pretended that Christ's Body was eaten by the Faithful in such a Manner, as to be reduced to the Condition of common Food digested in the Stomach.

From all this they conclude, that the Doctrine of *Paschasius* was that of the Church of his Time. That if it can be said with Truth, that *Amalarius* was in an Error, equally opposed to that of the Sacramentarians, and to the Doctrine of the Catholics, the Ministers cannot draw any Advantage either from his Error or his Condemnation; nor can weaken, by *Amalarius's* Testimony, that which *Paschasius* renders to the real Presence, as to that which was universally received of the whole Church of his Time. That if it be supposed, on the contrary, that he had been in the Opinion of the Calvinists, they must also confess, that that Opinion has been condemned in the 9th Century, by a Council of Bishops, and that of the Catholics confirmed.

There remain no other of *Paschasius's* Adversaries (continue they) but *Ratramnus*, and *John Scotus*, or *Scot*: But the Book of the first, say they, is so much embarrassed, and dark, that it is difficult to know his Sentiment. Therefore, as several Calvinists have endeavour'd to draw him on their Side; several of them, likewise, have confessed sincerely, that he favour'd Transubstantiation. Likewise there have been several Catholics who have abandon'd him, and several who have undertook his Defence. For *Tritemius* declares, that he had much Value for *Ratramnus*; and *Berengarius* himself, who made Use of the Book of *John Scot*, has never mention'd *Ratramnus* as one of his Upholders. And if there are in that Author several hard Expressions, there are likewise others so clear and formal, for the real Presence, that they cannot imagine what Advantage the Ministers can draw from it.

But let it be how it will, say they again, if it was ever so true that *Ratramnus*, in wanting to subtilise too much on the *Eucharist*, was fallen in some Errors, what could the Calvinists conclude from it, unless, That as there are found in some antient Authors Seeds of the *Arianism*, likewise there have been found, in one or two Authors, some Expressions like those of the Sacramentarians.

They say the same Thing of *John Scotus*, whom the Church of *Lyons* represents every where as an intriguing, busy, and ignorant Man, full of Errors; and that if those he produced on the *Eucharist*, and which were the Occasion of his Book being burnt at the Council of *Verfeil*, in 1053, have not been condemned in his Time, it is because they had neither Partisans, nor Disciples.

Therefore (conclude they) all these Adversaries the Ministers oppose to *Paschasius*, being either useless to them, as *Amalarius*, *Heribaldus*, &c. or entirely despicable, as *John Scotus*; there is not the least Reason to question, but that the Doctrine of *Paschasius*, on the real Presence, was that of the whole Church of his Time.

Aubertin, on the contrary, believes, that that Doctrine of *Paschasius* was a new one, which gain'd Ground in the dark Times of the 10th Century. It

is not surprizing, says he, pag. 940. that in so dark a Century, the erroneous Opinion of *Paschasius* having increased in the Bosom of the Ignorance, and Superstition, was found so well established in the 11th Century.

To this the Catholics answer, that for their Part, they think it surprizing, that Persons of Wit dare to advance Suppositions so contrary to common Sense. And to prove those Suppositions contrary to common Sense, they observe, that *Aubertin* wanting to place that Change at a Time where there were few Writers, who could convince him of Imposture by written Pieces, he has been obliged to suppose, that the Body of the Church was yet of the Opinion of the Sacramentarians, till the End of the 9th Century; because, during all that Century, there has been so great a Number of learned Men, that it is impossible, that had any Change happen'd in the Faith of the Church of their Time, they had not taken Care to inform Posterity of it.

It is true that *Aubertin* acknowledges, That not only at the Time *Berengarius* was condemned, i. e. in 1053, but even at the Beginning of the 11th Century, the Opinion of the Sacramentarians was so entirely banish'd from the Church, that it was a Crime deserving Deposition, to advance a Proposition which could approach near it. For he observes, himself, after an Author who has wrote the Life of *Robert King of France*, that *Lutherick*, Archbishop of *Sens*, having advanced some Propositions against that Mystery, *Robert* sent him Letters full of Menaces, in which he declares to him, that he would have him depos'd: And the Catholics say, that under the same King *Robert*, a Council was held at *Orleans*, in which were condemned two Priests, for having denied, among other Things, that the Bread was changed in the Body of Christ in the Eucharist. *Aubertin* confesses besides, that all those found in the 11th Century professing the Opinion of the real Presence, had not done it, by changing Sentiment, but had suckled that Sentiment with their Milk. *Hâc opinione*, says he, *una cum lacte imbuti, illam tanquam veram confiderenter obstruserant.*

The Roman Catholics say, in their Turn, that even granting to the Ministers all those Things (which they call absurd and incredible) there remain still some which cannot be granted, without renouncing entirely our Reason. That even supposing, as *Aubertin* will have it, that the Doctrine of *Paschasius*, whose Book, perhaps, never went further than the Kingdom of *France* during that whole Century, had spread in less than a hundred Years, not only in all the Latin Church, but likewise in all the East, and in all the schismatical Communion who had neither Commerce nor Union with the Latin Church; who never read any Books of the West, and not so much as understood the Language of those Countries; that supposing that all the World had embraced that Belief, and that the whole Church having been instructed in the distinct Belief of the real Absence of Christ in the Eucharist, had abandoned without the least Resistance the Faith of their Fathers, to follow a new Opinion introduced by a French Monk; how could it be supposed at the same Time, that no Trace should have remained of that Change, and that the Remembrance of it had been so obliterated, that in the 11th Century which follows immediately, no Body had ever heard of it? They ask if those who lived in the 10th Century, had not seen a great Number of Persons of the 9th Century? If the Lives of several was not so divided, that having spent Part of it in the 10th Century, and the other Part in the 11th, that they could tell some News of both? If King *Robert*, who caused those two Priests to be condemned to be burnt, had not lived himself 29 Years in the 11th Century, being dead but in the Year 1032; and having lived 61 Years? If those Persons who had lived in the 10th and 11th Century, had not seen several Persons of the 9th Century, or at least lived with an infinite Number of Persons who had seen them. If it could be possible that themselves being Witnesses, or living with the

Eye-witnesses, of an universal Change of Belief in the Church; they had informed none of their Descendants whom they had instructed in the Faith of that Change? If it could be imagined that a hundred Millions of Men would have agreed together to conceal from their Posterity, so prodigious, and so important an Event, that no Father had told it to his Children, and no Master to his Disciples: That no Monastery had preserved the Memory of it, and that the whole 11th Century had been so well confirmed in the Belief of the real Presence, that those who attacked it, were treated from the very Beginning as Novators and Hereticks; and those who undertook its Defence, presumed to publish that there had never been any other Faith in the Church; though at the same Time, *i. e.* in 1035, when *Berengarius's* Heresy began to appear, there were perhaps a hundred thousand Persons of 70 Years in the Christian Church, who having lived 35 Years in the 10th Century, had seen a vast Number of Persons, who had passed their whole Life in that Century, and who having been instructed by Persons born and instructed in the 9th Century, could not be ignorant that the Belief of the 9th Century on the *Eucharist*, was different from that professed throughout the Christian World, in the 10th; if it was true, as the Ministers suppose, that till the End of the 9th Century the whole Church was of the Opinion of the *Sacramentarians*.

The Answer of the Protestants to this, is, that the Error and the Truth have equally two Degrees, one of confuse Knowledge, and the other of distinct Knowledge; and that there is scarce any Difference to be observed between them, while they are in that first Degree of confuse Knowledge, unless one comes to the other called distinct Knowledge, the Ideas being so like one another, that they are not to be distinguished but with great Difficulty: That before an Error has made any Noise, and has been signalized by the Dispute, the greatest Part of the Church, the People, and several of their Pastors content themselves with holding the Truth in that undistinct Degree above-mentioned. And therefore it is very easy for a new Error to insinuate itself, and be established in the Minds under the Title of *Eclaircissement*, or Explanation given to the antient Truth; the Passage from the confuse Idea of Truth, being very easy under the Pretence of giving Light, Distinction, and Perfection to our first Knowledge.

To apply this general Observation to the *Eucharist*, they say, that before the Establishment of the Transubstantiation, every one believed that *Jesus Christ* was present in the Sacrament, and that his Body and Blood were truly received by the Faithful in the Communion, and that the Sacrament is the Sign and Memorial of the Death of *Jesus Christ*, and of his Passion; that it was the Faith of the whole Earth; but that they are not mistaken in saying, that there were few who carry their Meditations far enough to observe justly, the Difference of the two Opinions which separate, at present, the Reformed from the *Romans*; that there were even some who knew the Truth but in general, so that when the Error, on that Subject, has happened, and that building ill on a very good Foundation, it has declared that it must be understood, that *Jesus Christ* is present in the *Eucharist* substantially and locally, that his Body and his Blood are received in the Communion by the Mouth of our Body; it has been certainly a very extraordinary Novelty, and which had never been heard of before: But that it is not surprising, several have been thereby deceived, and have taken that Sentiment not for a Novelty, but for an Explanation of the common Faith.

On this Principle they suppose, that the Commonality of the Christians had but a confuse Belief of that Mystery; that they believed *Jesus Christ* present, without distinguishing if it was only in Sign, in Virtue, or in Substance; that they had no positive Thought of the real Presence, nor likewise a positive Idea of the real Absence; but had only a Negation of both. That the Church remained in that

Ignorance till the Time of *Berengarius*, when even the greatest Part of the Christians, say they, knew nothing of it, and the greatest Part of the Pastors knew but very little.

This Argument is very strong against the Catholics, and conducted with a great deal of Wit and Judgment: Therefore let's hear how they'll extricate themselves from this Embarrass, and refute this judicious Observation, which they attempt to do, by asking previously to any Thing else, if it be possible to suppose that the Faithful could have remained a thousand Years in the Church, in seeing every Day what was called the Body of Christ, in assisting every Day to the Sacrifice which was stiled the Sacrifice of the Body and Blood of *Jesus Christ*, in receiving often in their Mouth, what was said to them, to be the Body of *Jesus Christ*, *Corpus Christi*; and remain in that Condition without forming a distinct and determinate Thought, if what they saw, was, or was not the true Body of *Jesus Christ*? Which Question they answer in the Negative, founded on the following Reasons.

I. Because they say our Mind is form'd of such a Manner, that in thinking of a Body, it is impossible it should not apply it to some Place, as being always conceived in the Place, where it is expressed to us, unless we know that it is not there. That it is our Manner of conceiving, and a Sequel of our Nature, that our Differences have not given Birth to it, nor are our Differences capable to change it. Therefore the Faithful in assisting at the Sacrifice, hearing say that what was given them was the Body of *Jesus Christ*, and answering *Amen*, *i. e.* in Truth, did think of him, and applied him to some Place. The Words which made them think of him, have represented him to them as present on Earth. That they must then absolutely have followed them, or contradicted them, in taking them in another Sense. If they have conceived *Jesus Christ* present on the Altar, and in their Mouths, they had then a distinct Belief of the real Presence; and if on the contrary, though the Words expressed him present on Earth, they have only considered him as present in Heaven, they must have had a very distinct Belief of the real Absence, since it made them correct the Sense to which the Words inclined them. And therefore, it is impossible they should have remain'd, with Regard to that Mystery, in that Degree of Confusion and Indistinction, in which the human Mind cannot subsist.

II. The Suspension of Mind between the *Yes* and *Nay* of two contradictory Opinions, cannot proceed but from two Causes, neither of which can be admitted with Regard to the *Eucharist*. The first is a true Irresolution, which proceeds from the Diversity of Reasons, between which the Mind is at a Stand to determine itself. In that Kind of Suspension, one considers distinctly the two opposite Opinions, but as they are seen supported on Reasons equally strong, one knows not what Resolution to take. It is apparent that it cannot be said, that it is in this Manner, the Church has remained in a confused Belief on the Subject of the *Eucharist*; for its being of an extreme Importance, and there being a great Difference between the Body of *Jesus Christ* really present, or significantly present, it is not possible that the Christians could have remained in that Doubt, without searching to be better informed, and without determining themselves afterwards, on the Instructions given them on the one or other of those two Opinions; which would have changed that confused and undeterminate Knowledge, into a distinct and determinate one. Therefore it remains but the second Cause of that Suspension, which is the Want of Application to the particular Differences which distinguish the opposite Opinions; the Mind contenting itself, sometimes, to conceive Things in a certain Generality, which unites them without descending to the Particulars which distinguish them. It is properly in that Manner, say the *Roman Catholics*, that the Protestants want us to believe, that the Belief of the *Eucharist* has remained confused in the first Centuries of the Church, and it is notwith-

notwithstanding, say they also, what cannot be said with the least Appearance of Reason; for the Words, whereby that Mystery is expressed, either in the Celebration of the Sacrifice, or in distributing the Communion to the People, or in instructing them of what they ought to believe, signify so precisely, and so naturally, the real Presence, and fix so well the Mind to the Consideration thereof, that it is impossible, after they have been so often repeated to the Christians, they had not been obliged, thereby, to form some Judgment of it; viz. or to reject it, or to admit of it.

III. This Consideration will become still more sensible by the third, which is, that the Custom Men have to not conceive Things without investing them with some Sounds, causes that so soon as the Sound strikes the Ear, the Idea which is ordinarily joined to that Sound, offers itself immediately to the Mind, and that Idea never fails being received, unless the Opinions the Mind is prejudiced by, or the other Circumstances which accompany that Idea, obliges to banish it, to substitute another to it. When one hears the Word Arm, or Hand, he immediately conceives common Arms and Hands, but when they are attributed to God, the distinct Knowledge that God is incorporeal, causes that they banish that Thought to substitute another to it, which is that of Power and Strength. But if they had not that distinct Knowledge, they would receive that corporeal Idea of Arm and Hand, as did the Anthropomorphites. When one hears the Word Light, the Image of a corporeal Light offers itself immediately, and endeavours to enter into our Mind; but when *Jesus Christ* says of himself, that he is the Light of the World, and we read in *St. John*, that there is a true Light which enlighten all Men, the Knowledge we have that God is not a Body, makes us banish that corporeal Image, to substitute to it the Idea of a spiritual Light, which enlighten, not the Body, but the Mind.

We ought to conceive by the Word God, a true God, and it is the Idea which offers immediately to the Mind, when we hear that Word pronounced; but when we hear at the same Time, that it is *Moses*, who is called the God of *Pharaoh*; that it is *Men*, of whom it is said, *Ego dixi Dei estis, & filii excelsi omnes*; and of the false Divinities *St. Paul* means to speak, when he says, that *there are several Gods and several Lords*. That Idea which offers is excluded, and the Mind furnishes of itself, another, which he sees very well was designed in those Places, but does not furnish it but by the distinct Knowledge he has, that those Men, and the false Divinities, are not true Gods; and therefore, a Pagan who has not that Knowledge, could imagine simply, that *St. Paul* believed that there were several Gods.

It must be then concluded (continue they) that the natural Idea of Words, offers itself first to the Mind, and is always received there, unless it be banished by a contrary Belief. Therefore unless one would absolutely renounce Sincerity and Truth, and deny with a ridiculous Obstinacy, the clearest, and most sensible Things; it is impossible to not acknowledge, that the common Expression used by the Fathers, in the Instructions by them given to the People on that Mystery, and in the Celebration of the Sacrifice, includes the Idea of a real and substantial Presence, in their natural and literal Sense, and cannot have another unless they be taken in a metaphorical Sense.

For they ask the Protestants, what signify naturally these Words, *This is my Body*? What signified those used in giving the Communion to the Faithful, *Corpus Christi*, the Body of Christ, to which they answer (thereby they must have believed that it was truly the Body of Christ) in saying *Amen*? And if it is not true, that those Words taken simply, signify that it was truly the Body of *Jesus Christ*?

They say farther, that they could make a large Volume of all the Passages of the Fathers, which taken literally and simply, signify a real and substantial Presence, and a true Transubstantiation; but that it suf-

fices for their Design, to relate some of them. Therefore they ask if it can be denied, for Example, that one is struck with the Idea of the real Presence, by these Words of *St. Ignatius*, in his Letter to those of *Smyrna*, where speaking of certain Hereticks, he says; *that they did not receive the Eucharist, and the Oblations; because they did not confess that the Eucharist is the Flesh of our Lord, who has suffered for our Sins, and whom the Father has raised from the Dead through his Goodness?*

By these Words of *St. Justinus*, in his second Apology; *we do not receive those Things as if they were but common Bread, and common Drink; but as we know that Jesus Christ our Saviour, who has been made Man by the Word of God, has vested himself with Flesh and Blood for our Salvation; we know likewise, that that Meat, and that Drink, which by the Change they receive in our Bodies, feed our Flesh and our Blood, having been consecrated and made Eucharist, by the Prayers which the same Word of God has taught us, are the Flesh and Blood of that same Jesus Christ, who has been made Man for the Love of us. For the Apostles, in the Writings they have left us, called Gospels, say that Jesus Christ ordered them to use it as he had done.*

By these Words which *Gelasius of Cistick* relates, for being the Words of the great Council of *Nice*: *Let us not be meanly attentive to the Bread, and to the Chalice, which are exposed to our Eyes, but raising our Mind, let us conceive by Faith, that the Lamb of God who blots out the Sins of the World, is present on that sacred Table; and immolated by the Priests, without Effusion of Blood, and taking truly his precious Body, and his precious Blood, believe that they are the Pledges of our Resurrection?*

By these Words of *St. Cyril of Jerusalem*, *Catech. 4.* *Jesus Christ having said of the Bread, this is my Body; who will, henceforward, question it? This is my Blood, who would entertain any Doubt of it, saying it is not his Blood? He has formerly changed Water into Wine, at Cana in Galilee, by his sole Will, why should he not be believed when he changes Wine into his Blood?*

By these Words of *St. Gregory of Nyssen*, *orat. catech. The same Virtue, which caused that in the Body of Christ, the Bread he used to eat was changed into the Nature of his divine Body; causes, likewise, the same Thing in the Eucharist; for as the Power of the Word changed into his Substance, in his sacred Body, which was fed with Bread, and thus, in some Manner, was Bread; likewise here the Bread sanctified, as the Apostle says, by the Word of God and Prayer, not becoming the Body of the Word by Means of Eating and Drinking; but being changed all on a sudden, into the Body of the Word, by the Word, according to what has been said by the Word himself, This is my Body.*

By these Words of *St. Ambrose*, in his Treatise for the Instruction of those newly baptized, *c. 9.* *You'll say perhaps I see another Thing; how can you assure me that I receive the Body of Jesus Christ? It is then what remains to be proved. But how many Examples can I produce, that it is not what Nature has formed, but what the Blessing has consecrated; and that the Blessing has more Efficacy than Nature itself? Afterwards, having related several Miracles of the Old Testament, he concludes, Could not the Word of Jesus Christ, which could make of nothing all that has a Being, change what has a Being, into what it was not before?*

By these Words of *St. Gaudentius*, Bishop of *Bassia*, in *Exod. tract. 2.* *The Creator and Master of Nature, who produces Bread from the Earth, makes afterwards his proper Body of that Bread, because he can do it, and has promised it, and he who has made Wine of Water, makes likewise his Blood of Wine.*

By these Words of *Optatus*, Bishop of *Milevis*, *Lib. 6. cont. Permenium*, where he shews the Sacrileges of the *Donatists* against the Eucharist. *What's the Altar, says he, but the Seat of the Body and Blood of Jesus Christ? What Offence had you then received from Jesus Christ, whose Body and Blood dwelt on that Altar, at certain Times, to do him that Injury? And lower, Notwithstanding that detestable Crime has been renewed,*

renewed, and you have again broke the Chalice which used to carry the Blood of Jesus Christ?

St. Chrysostom (say they again) is so full of Expressions, which mark naturally a real Presence, that *Aubertin* is oblig'd to acknowledge, that they are in great Number, and specious, *multa & speciosa*: In Fact (pursue they) what is more specious, than what he says in Homily 83. on St. Matthew, *How many there are who say at present, could I have but seen his Form, his Figure, his Vestments? Well, you see him, you touch him, you eat him: You was contented to see only his Vestments, and he gives himself to be seen, to be touched, to be eaten, and to be taken within you?*

St. Isidorus of Damietta, says, *Epist. 109. That the Holy Ghost causes that the common Bread, proposed on the Table, becomes the proper Body Jesus Christ has taken in his Incarnation.*

St. Augustin says, in his Epistle to Januarius, *That it has pleased the Holy Ghost, in Honour of that great Sacrament, that the Body of Jesus Christ should enter the Mouth of the Christians, before all other Meat.* And *Lib. 5. de Baptism. cont. Donat. c. 8.* he says of the Eucharist, *That it is the Body and Blood of the Lord, even for those who eating it unworthily, eat and drink their Judgment.*

St. Cyril, Patriarch of Alexandria, in his Anathema's, approved in the Council of Ephesus, speaks in this Manner: *We celebrate the holy vivifying and unbloody Sacrifice in the Churches, believing that the Body which is before us, is not the Body of a common Man, and semblable to us, and the Blood the same; but we receive it, as having been made the proper Body and proper Blood of the Word, who vivifies all Things.*

And Theodotus, Bishop of Ancyra, in an Homily he made in that Council: *He does not lay in a Manger, says he, but is exposed to our Eyes on that salutary Table, that Manger is the Mother of that Table; he has been put in that Manger, that he may be eaten on that Table.*

The most learned among the Protestants (say they again) are obliged to confess, that there are found in the Fathers of all the Ages of the Church, an infinite Number of such Passages; and that it is the common Manner of Speaking, in the Church, of the Eucharist. That the Catholics have no Need to examine, if a metaphorical Sense could not be given to those Expressions, or to refute all the Subtilties, whereby *Aubertin* endeavours to do it in his Book, since it is not necessary for the present Dispute; and that if some Calvinist would undertake to prove, that they can or ought to be understood metaphorically, he would shew thereby that he does not so much as understand the State of the Question; since that Question is not to know if those Passages can be taken in a metaphorical Sense, but if it is not true that the first Idea, which they offer to the Mind, is not that of a real Presence, such as the Catholics believe it? Which Idea must have struck all the Christians, as presenting itself to their Eyes, and endeavouring to introduce itself into their Mind. Which to prove, they ask, if they have admitted or not admitted that Idea, when it presented itself; if they have received the natural and simple Impression thereof, or destroy'd it, by substituting another to it? That if it be confessed, that they have received it, their Adversaries grant them all they want, which is, that the real and substantial Presence has always been believed in the Church: And that if it be pretended that they rejected it, they must then have form'd a Judgment of it, and declar'd themselves against that Belief; and consequently believed, positively and distinctly, the real Absence. That therefore, whatever Supposition may be made, that pretended Confusion of Belief on the Subject of the Eucharist, cannot subsist.

IV. But they say further, that even by that it is clear, that the whole antient Church has had a distinct Belief of the real Presence: For why should the Christians have rejected the natural Sense of those Words of the Fathers; since the Ministers confess, that they had not a positive Belief of the real Absence;

and there is but that positive, express and distinct Belief, which can hinder Words so formal, from inclining the Mind to the Belief of the real Presence? Therefore, conclude they, the Supposition of that confus'd Belief destroys itself, and establishes the Truth: distinct Belief of the real Absence of Jesus Christ in the Eucharist, it necessarily follows hence, that they have took the Words of the Fathers in their literal and natural Sense, which was not formerly contrary to their Sentiment; that they have not opposed the Impression, which they must have made in their Mind; and as they propose the Idea of a real Presence, they have received in their Mind that distinct Idea, which they had no Occasion to reject.

V. They repeat once more, because they imagine it necessary to have that Reason very well understood, which, they pretend, decide their Differences with the Protestants; that either those Expressions of the Fathers which form so clearly the Idea of a real Presence, have been received by the Faithful without Explication, and in the simple Sense of the Words, or have been explained in a metaphorical Sense, and void from the natural Signification of the Words: That let the Protestants chuse which of these two Subpositions they please, they'll equally destroy that confuse Belief. For, say they, if it be true for Example, what *Aubertin* says, that when St. Cyril of Jerusalem, said to those newly baptized, *Catech. 4. Believe certainly, that this apparent Bread is not Bread, though the Taste represents it as such, but the Body of Jesus Christ;* he wanted to say that that Bread is no longer a common Bread, but a sanctified Bread, and that it was the Body of Christ in Figure, not in Truth, which would be a strange Manner of expressing himself. It is clear that if the Faithful had understood it in that Sense, and with that Explanation, they had had a very distinct Idea of the real Absence; and therefore had not remained in that Degree of Confusion. That if it be supposed on the contrary, that they have not added that strange Interpretation to the Words of that Father, it is still more visible that they have had a distinct Belief of the real Presence; since unless the natural Sense thereof be corrupted by very violent Explanations, it is impossible they could imprint another Idea in their Mind.

But there are no other Words wanting, say they again, but those which have always been in the Mouth of the Faithful: That the Eucharist is the Body of Jesus Christ, to shew that they have had necessarily a distinct Idea, either of the real Presence or real Absence. For they had either given to those Words the same metaphorical Explanations the Ministers give to them, in understanding that the Eucharist is the Body of Jesus Christ in Figure, in Representation, in Operation, and not in Truth; or have not added those Restrictions to it: For if they had added those Restrictions, they had believed the real Absence, as the Ministers believe it; and if they have not added those Restrictions, they have believed the real Presence, since it is the simple and natural Sense of those Words, when they are understood without Restriction and Metaphor. When a Metal is said to be Gold, it is said that it is really and substantially Gold. When it is said of a precious Stone, that it is a Diamond, it is said that it is really and substantially a Diamond. Likewise to be the Body of Christ, and to be substantially and really the Body of Christ, are not two different Ideas, but one and the same Idea; so that it is the same Thing to say that the Faithful have always believed that the Eucharist was the Body of Jesus Christ, without other Explication; as to acknowledge that they have always believed, that it was really and substantially the Body of Jesus Christ.

Therefore, conclude they, in whatever State the Faithful may be supposed, it is impossible to make it agree with that confuse Belief which the Protestants will establish; and even from that alone, that it is confessed, that they have not had a very positive Belief of the real Absence, it must be concluded inevitably

cibly that they have had a very distinct Belief of the real Presence.

The *Roman* Catholicks, the better to strengthen their Sentiment, and render it inexpugnable, say they, add to those Reasonings and Proofs above-mentioned, this following Proposition, which appears to me a very bold one, that it was not possible for the Faithful to take in a metaphorical Sense, the common Expressions with which the Pastors used to instruct them in the Mystery of the *Eucharist*, and that the Protestants cannot suppose it, without supposing at the same time, that it has happened in the Church, for the Space of a thousand Years a continual Prodigy, which is, that the Pastors have spoke all that Time in a Manner contrary to their Thoughts, and the People have heard them in a Manner contrary to their Words; so that it should be said, that there was in the Pastors a supernatural Blindness, not to perceive the Occasions of Errors they gave to the People, by the Extravagancy of their Metaphors, and a supernatural Light in the Faithful, not to be abused by Expressions so deceiving and so contrary to common Sense.

They draw the Proofs of this Proposition, from the Rules of the Intelligency of human Language, and from the Means Men have, to distinguish figured Expressions, from simple and natural ones. For it is certain, say they, all the Dispute between the Catholicks and Sacramentarians, on this Subject, is reduced to this Point, *viz.* if the Expressions of the Scripture, and of the Fathers, are to be taken in the Sense which offers first to the Mind, *i. e.* in a simple and natural Sense, or if they must be taken in a metaphorical one.

The Catholicks pretend the first, and the Sacramentarians the second; the Catholicks say, that when the Fathers assure us, that the Bread by the Consecration is changed, and made the Body of *Jesus Christ*, they understand that it is really and truly changed into the proper Body of *Jesus Christ*. The Sacramentarians say, on the contrary, that the Fathers wanted to signify nothing else, but that the Bread is changed figuratively, and not really.

It is in what this important Dispute consists, the Decision whereof, say the *Roman* Catholicks, depends entirely on the Means and Rules Men have to distinguish simple Expressions, from metaphorical ones. That these Rules and these Means, are very difficult to know and to fix; though, notwithstanding, there be some; otherwise, not only the Faith of a particular Mystery would be destroy'd, but generally that of all the Mysteries; since there is none, the Proofs whereof could not be easily destroy'd, in giving a metaphorical Sense to the Expressions of the Scripture and of the Fathers, which contain them.

It is said, for Instance, in the Scripture, that *Jesus Christ* is God, the *Arians* and *Socinians* will answer, that he is God metaphorically, that he is God by Grace, and not by Nature; that he is God, but submitted to another God greater than him. If it be spoke of the Holy Ghost, as of a Person, they'll say that it is a *Prosopopœa*. If it be said that *Jesus Christ* is born of a Virgin, the Answer will be, that *that* is true metaphorically, because he has passed through *Mary*, as through a pure Channel, according to the Opinion of some *Eutychians*. If it is said that he has suffered and is dead, the *Manicheans* and *Mahometans* will answer, that he has suffered and is dead in Appearance and metaphorically, because he has appeared outwardly to suffer. If it is said that he has redeemed Men with his Blood, the *Socinians* will answer, that it is not to be understood that the Blood of Christ has been offered as the Price of their Redemption, but that such an Expression, shews nothing else but that *Jesus Christ* being dead, to confirm the Truth, we ought to attribute to his Death, the Deliverance of Men whom God receives into Grace, when they believe the Truths which *Jesus Christ* has taught them, and follow the Rules which he has given them.

Lastly, say they, the whole Religion, and all the Proofs extracted from the Scripture, and the Fathers

to establish it, lean on this Principle, that Men can distinguish simple Expressions from figured Expressions, and were they deprived of those Means, they would likewise be deprived of all Means to discern the Truth from Falshood. Therefore, there is but to consider those Rules, by which Means we make that important Discernment: And provided we act sincerely in it, they believe that it is not possible but one must remain convinced, that the Faithful could by no Means take the ordinary Expressions of the Fathers, with regard to the *Eucharist*, in a metaphorical Sense, and that they must of Necessity have taken them in the natural Sense, which the Words offered to them. The *Roman* Catholicks give us some of those Rules, which are as follow:

I. When the same Thing can as easily be expressed naturally, as metaphorically, the natural and simple Expressions are commonly more frequent than the metaphorical; whence it happens that the simple Expressions forming a distinct Idea of the Truth, serve to reduce the metaphorical to it. They say, when it can be as easily expressed, for they are of Opinion that there are Things so much above the Reach of a human Mind, that they seldom can be understood, but in using Metaphors, taken from Things more proportioned to the human Understanding. The Reason of that is, that Men incline commonly, when nothing hinders them, towards that which is most conformable to Truth and Nature; but the metaphorical Expressions are in some Measure contrary to Nature, because they are falsely taken in a strict Manner; and therefore, cannot be so common, and if they were, they would become captious and unintelligible.

II. The Metaphor including something false, it is against Nature to continue long in it, and the Rhetoricians observe, that when one does it, it is no longer an Ornament but a Fault, called *Enigma*; because it renders the Discourse difficult to be understood. Therefore, say they, let us examine by that Rule, the Expressions of the Fathers which mark of themselves a real Presence, and we'll see that it was not possible for the Faithful to take them for Metaphors: For after they have used them, they do not come out of it, but persist in it to the End, and even make the second stronger than the first; and to speak of that Mystery as they have done, they should have had a formal Design of deceiving those they spoke to. They say that they will produce, but an Example of this, among the great Number of those which occur, of which those who are instructed in those Matters know very well, there could be made a whole Volume. They draw that Example from the 24th Homily of St. *Chrysostom*, on the first to the *Corinthians*, and leave to all Persons of Sense, to judge if there was ever any Thing, they don't say more enigmatical, but more nonsensical, than the Discourse of that Saint, taking those Expressions for Metaphors, as the Ministers take them. *These Words of the Apostle*, says he, THE CHALICE OF BENEDICTION WHICH WE BLESS, IS IT NOT THE COMMUNION OF THE BODY OF JESUS CHRIST? ought not to imprint less Terror, than Faith in the Mind; because they teach us, that what is in the Chalice is the same Blood which flowed upon the Cross. Here, say they, St. *Chrysostom* is entered into a Metaphor, according to the Protestants, and into a strange Metaphor. For, without doubt, to shew simply that Wine is the Figure of the Blood of *Jesus Christ*, it would be very surprising to say, that what is in the Chalice is the same Blood which has flowed from the Saviour; but let's see, continue they, how the same Saint proceeds; *Jesus Christ*, says he, was not contented with delivering up his Body for us to Death, but because the first Flesh which was formed upon Earth, had been deprived of Life and subjected to Death, by the Sin; he has formed, as it were, another Substance, that's to say, his Flesh, which though of the same Nature with ours, was notwithstanding, free from Sin, and full of Life; and has given it to all, that all should be fed with it, and that divesting themselves of that antient Flesh, they could be renewed by that

new Flesh: It must be observed that the Apostle, speaking of the Jews, does not say, that they are Partakers of God, but only Partakers of the Altar; because what was offer'd formerly on the antient Altar, was to be consumed by Fire; it is not so of the Body of Christ; in what can that Difference consist? in that a Communication is made of that same Body to the Faithful; and thus we are not made Partakers of the Altar, but of the Body itself of Jesus Christ. The Metaphor, say the Roman Catholicks, begins to be pretty long; and they are sure that a Calvinist must be tired of it: But St. Chrysostom don't design to come out of it so soon. He establishes on that Truth, continue they, the important Instruction he gives to the Faithful, not to approach that Sacrifice, but with a Spirit of Peace and Charity; that they may be worthy to meet Jesus Christ in the Clouds, when he shall come down from Heaven, at the End of the World. Then reassuming his pretended Metaphor, *If it be thus*, says he, *that a Person could be presumptuous enough to receive with Incivility and Indifference a King who would come to visit him; but what do I say, receive a King? who would touch his Cloaths with a too great Familiarity, and too little Respect, if even he was in a Desert, and without a Retinue, if, says I, no Body has the Temerity to touch only the Cloaths of a Man, how can we be so presumptuous to touch within us, with Dishonour, and with Injury, the Body of God himself, who is infinitely above all Things? That Body which is so pure, and in which there cannot be the least Spot, which has been united, and inhabits with the Divinity, by which we receive our Being and Life, and by which the Gates of Hell have been broken, and those of Heaven opened? Let us not be then I desire you, continues he, our own Murderers, but approach that divine Body with a great deal of Fear, and with an extreme Purity, and in considering it when it is presented to you, say within yourselves: It is that Body which causes that I am no more of this World, that I am no more Captive, that I am free: It is that Body which makes me hope that I shall one Day enter Heaven.—Death could not destroy that Body, by the Nails it was pierced with; the Sun seeing that Body hanging on the Cross, has turned away its Rays.—This is the same Body which, being pierced with a Lance, has flowed with two Fountains, salutary to the whole Earth, one of Blood, and the other of Water.—And that Body which Jesus Christ has given us to hold and to eat, with a prodigious Excess of his Love.—Consider that you see on Earth all that is the most excellent and the most adorable in Heaven; that you not only see it but touch it, eat it, and carry it into your own Houses.*

Certainly, conclude they, a Man, who to make us understand simply that the Bread is the sacred Sign of the Body of Jesus Christ, would continue in such a Metaphor, could not be the most eloquent Man of his Age, as St. Chrysostom was, but the most impertinent Tatler that ever was: And it is not of St. Chrysostom alone he would be obliged to judge thus, but of all the Fathers in general, since they all speak in the same Manner, when they mention the Eucharist.

III. The Metaphors cannot be proved, because as they do not subsist for themselves in the Discourse, and taking the Place of simple Terms, they are false in their proper Sense, and are true but in a wide Sense; therefore they are not to be proved in the Sense they offer first, because it is false. But the Fathers prove very often the Expressions which include the real Presence; and after they have told us, for Example, that the Bread after the Consecration is the Body of Jesus Christ, they endeavour to make us believe it by the Example of the other Wonders which God has operated; of the Creation of the World; of the Miracles of the Old and New Testament, on the Change of Water into Wine at Cana of Galilee; and particularly by the Words of Christ, who assures us of it.

IV. Metaphors, say they, are never a Subject of Doubt, or Surprise, when they are understood; because it is known that they are not to be taken literally. If it is said, that Benjamin was a Wolf; that

Jesus Christ was a Lion of the Tribe of Judah; that Cows were Years; that the Blood of the Victims was the Covenant: When those Expressions are understood in their true Sense, one is not surprized at it; and is not consulted as a Thing difficult to believe: For it is not asked, how it could happen that Benjamin was a Wolf? Jesus Christ a Lion? &c. but it is common to the Fathers to declare, that there is Room to be surprized, that the Bread be the Body of Jesus Christ. They form these Questions; how can it happen that what I see be the Body of Jesus Christ? *Aliud video*, says St. Ambrose, *quomodo me suadeas quod corpus Christi accipiam?* They endeavour to strengthen the Faithful against those Doubts, in telling them, that the Word of God is more to be believed than what affects our Senses.

V. They say that Metaphors are not used in all Sorts of Discourses; that extraordinary Metaphors are not proper in simple Discourses, historical, or dogmatical; that they are Flights of the Mind, which commonly proceed from too much Heat. But the Fathers use every where Words, which shew the real Presence, in the most literal Explications of the Scripture, and in the most familiar Homilies; they were used in the most common Language, and most destitute of the Ornaments of Eloquence. They ask, if there is any Thing more simple than the Discourse of St. Justin, and of St. Gregory of Nyssen, they have related:

VI. That it is ridiculous to use Metaphors before Persons, who, according to all Appearance, could not understand them; and that one is obliged in those Cases, at least to explain them. But that the Fathers use the Expressions, which mark the real Presence, in Writings addressed to Pagans, as St. Justin, and in Discourses made before those newly baptized, who had not yet the least Tincture of that Mystery, as St. Ambrose, St. Gregory of Nyssen, St. Cyril of Jerusalem, and St. Gaudentius have done. That the Pagans who knew nothing of our Religion, and those newly baptized, to whom were given the first Instructions of the Eucharist, could not understand those Expressions otherwise than in their natural Sense; notwithstanding which, the Fathers do not explain them: That therefore they did not want they should be taken for Metaphors.

VII. That there are Metaphors harder than others, and they are those which are less authorised by Use, and the common Language; and the harder they are, and without Example, the more they are unintelligible in the metaphorical Sense, and easier to be taken in the literal and natural one. But if the Expressions used by the Fathers, in speaking of the Eucharist, were metaphorical, they should be consider'd as the harder Metaphors Men have ever used: So that it was impossible they could have been understood by the Simple, in that Sense.

That to conceive better the Hardness of those Metaphors, it must be observed, that where there is a natural Similitude between two Terms, it is not surprizing, that the one is substituted to the other. For Example, because a Man in a violent Passion is like a Brute, it is said, naturally enough, that Passion changes Men into Brutes; because the Soul, separated from the Body, are very like Angels, it is often said that a Man after his Death is become an Angel, or is changed into an Angel. But when between two Terms, there is but a Relation of Institution, the Terms are not thus substituted to one another in the common Way of Speaking. It is not said, for Example, that Ivy is changed into Wine, because it becomes the Sign of Wine, by the Institution of Men. It is not said that the Olive-Tree is made and changed into Peace, because it is made the Sign of Peace in those who carry it for that Effect. It is not said commonly that the Paschal Lamb, nor the Manna, have been changed into the Body of Jesus Christ, because the Relation of Institution they have with the Body of Jesus Christ, is not sufficient to justify the Hardness of those Metaphors. The Water the Baptiz'd are washed

washed with, is the Figure of the Holy Ghost, Charity and Grace. The Holy Ghost, according to the Language of the Fathers, imprints in it a secret Virtue to act in the Souls, and to produce in them, Justification and Grace; nevertheless, neither the Relation of the Sign to the Thing signified, nor the Impression of that Virtue in the Water, have ever engaged the Fathers to say that the Water is made the Holy Ghost; that before the Blessing it was only pure Water, but that after it, it has been changed into the Holy Ghost. Whereas those Expressions are common to them, on the Subject of the *Eucharist*, and compose the common Language used to speak of it.

VIII. To shew still better what little Appearance there is for the Fathers to use Metaphors, so hard and so dark, or the People could have understood them in a metaphorical Sense, it is necessary to observe, that there are two Sorts of Languages, one which can be called of *Constraint*, and the other a *natural Language*. They call *natural Language*, that which we are inclinable to use, by the Desire of making ourselves understood; and *Language of Constraint*, that which one chuses, not only to express himself, but to join to his Sentiments, Expressions received and authorised by others.

For Instance, when the Scripture and the Fathers call *Jesus Christ* God, Lord, Principal, End; that they attribute to him the divine Power and Majesty, the Creation and Conservation of all Things, that they give him the Name of Word, the Character of the Substance of his Father, that they may defer to him Adoration, the Remission of Sins, the Beatification of Men, they have done it with the sole Design of expressing what we ought to believe of it.

But that when we see the *Socinians* use the same Terms, to mark their Belief of those Things, though they be not very proper to express it, we ought not to be surpris'd at it, since it is by Constraint they do it. They see those Terms authorised in the Scripture, and in the ancient Fathers, and it is necessary to them, that they should not appear opposite to the Scripture, nor to the ancient Fathers. Therefore they chuse rather to give a forced Sense to the Words, and speak a forced Language, which they deprave and explain afterwards in their own Manner, than to give to understand by the Difference of their Language, the Contrariety of their Opinions with the Sentiments of the first Christians, and the Truths of the Scripture.

Likewise (say they) when the *Calvinists* use, sometimes, to express their Belief with Regard to the *Eucharist*, the same Terms the Fathers have used, and grant that the Bread and Wine are changed into the Body and Blood of *Jesus Christ*; and several other Expressions, which shew naturally and simply the Belief of the Catholics; there is no Reason to be surpris'd at it, nor even of accusing them, on that, of Folly; they are forced to it; the Motive is plainly seen which engages them to it; they will not appear contrary to all Antiquity; it is important to them, that it should be thought that the Language of the Fathers can agree with their Sentiments; and therefore they use it sometimes. They make whole Chapters which bear for Title that the Bread and Wine are made the Body and Blood of *Jesus Christ*, and that they are changed into the Body and Blood of *Jesus Christ*; they employ the strongest Expressions, and deprave them afterwards by forced Interpretations.

All that is not very strange (continue they) hard and extraordinary Metaphors, are not so surpris'ing, when it is seen that they are used by Force. The Necessity excuses them, and renders them intelligible. But the Fathers have had Recourse to none of those Excuses or Reasons; they were by no Means obliged to use those Expressions; they had no Adversary whose Reproaches they fear'd; they had not that View of joining the ancient Expressions with their present Opinions. They followed, simply, Nature, and had no other End than to chuse the most proper Terms to express their Thoughts, and to form in the Mind of their

Readers, the true Idea they ought to have of the *Eucharist*.

It is in following Nature thus (say they again) that they have said to us, that the *Eucharist* was the true Body of *Jesus Christ*; that there was no Room to doubt of it, and that the Bread and Wine after the Consecration, were changed into his Body and Blood. That we may judge thereby, if there is the least Appearance that they had used those Expressions, and many others equally strong, and equally precise, if they had only wanted to tell us that the Bread becomes the sacred Figure of the Body of *Jesus Christ*; and that it changed of Signification and Use. If there be something in our Reason, and in the Custom of human Language, which could engage us to use Terms so wide from what we want to understand.

They desire the Protestants to tell them with that Sincerity they recommend to others, in several of their Writings, if they would believe that an *Indian* was very well instructed in the Belief of the *Reformed*, by a Man who would content himself with catechising him in these Terms: *The Lord Jesus the same Night, in which he was betrayed, took Bread, and when he had given Thanks, he brake it, and said, take, eat, this is my Body; after the same Manner, he also took the Cup, saying, this is my Blood. Since, then, when speaking of the Bread, he has declared that it was his Body, who will ever dare to call that Truth in question? And since, when speaking of the Wine, he has assured so positively that it is his Blood, who will ever doubt it, and dare to say, that it is not true, it is his Blood?* *Jesus Christ, while in Cana of Galilee, changed Water into Wine by his sole Will; and can we believe that he is not worthy enough to make us believe, on his Word, that he has changed Wine into his Blood?* *If being invited to a human and terrestrial Wedding, he operated that Miracle, contrary to Expectation, ought we not to acknowledge still sooner, that he has given to the Children of the celestial Spouse, his Body to eat, and his Blood to drink?* *For under the Species of Bread, he gives us his Body; and under the Species of Wine, he gives us his Blood; that being made Partakers of that Body, and of that Blood, we should become one same Body, and one same Blood with him. For by that Means we become, as it were, Christ-Bearers in our Bodies, when we receive in our Mouth and in our Stomach, his Body and his Blood. Therefore, I desire you Brethren, to consider them no longer as common Bread, and common Wine, since they are the Body and Blood of Jesus Christ. For though the Senses tell you that it is nothing but Bread and Wine, Faith must confirm you in the Truth I tell you. Take Care to judge of it by your Taste, but let Faith make you believe, with an entire Certainty, that you have rendered yourselves worthy to partake of the Body, and of the Blood of Jesus Christ.*

Let the Protestants tell us sincerely (say the *Roman Catholics*) what Judgment they would form of that Catechist; or those among them, who, though very well instructed in their Belief, were not learned enough to discover that these Words are those of St. Cyril of Jerusalem? Could they take such a Preacher for any other, but a very zealous Catholic, who would instruct that *Indian* in the Faith of the *Roman Church*? But if, notwithstanding, they were informed that that Man is a *Calvinist*, and that he wanted to say nothing else, in that Discourse, but that the Bread and the Wine were the sacred Figures of the Body and Blood of *Jesus Christ*, and that in taking them one is united by Faith to *Jesus Christ* who is in Heaven; could they not answer that that Preacher is very unwise to express himself so as to make People understand quite the contrary of what he thinks, and to throw Men into Error, instead of teaching them the Truth? But however, this Preacher, whom all the simple *Calvinists* would take without doubt for a very zealous Catholic, or for the most impertinent of all Men, is, as they have said already, St. Cyril, Patriarch of Jerusalem, and these Expressions which they would judge Catholic or Extravagant, are the proper Words of that Saint, and not only of that Saint, but of all the Fathers. It is the

common Language of all Antiquity ; it is the Manner of teaching the Simple what they ought to believe of the *Eucharist*.

Aubertin objects to all this, that it is not at all ridiculous, to give to the Passages of the antient Fathers, which are supposed to mark a real Presence, the metaphorical Sense which the *Calvinists* give to it, and endeavours to invalidate the Expressions employ'd by the Catholics to prove the real Presence, by others which are metaphorical ; as when it is said that Men are changed into Beasts by Avarice ; that the Grace of Baptism changes us into a divine Nature ; that Men will be changed into Angels by Death, &c.

To this the Catholics reply, that among all these Examples, *Aubertin* does not propose one, where it is said, that a Sign of Institution is changed into the Thing signified, to shew only that it is made the Sign thereof ; which is properly the Species in Question, since the Protestants want to make them believe, that the Bread is changed into the Body of *Jesus Christ*, that signifies, that it becomes the sacred Sign of the Body of *Jesus Christ*. Therefore, the Catholics pretend, that there is no Need but of common Sense to discover the strange Disproportion of all those Expressions, *Aubertin* compares together. Since the Expressions of the Fathers on the *Eucharist* are such, that they cannot be taken in a metaphorical Sense, according to all the Rules whereby Men distinguish the Metaphors from simple Terms ; when as the Examples proposed by *Aubertin*, contain but Expressions which ought to be taken for metaphorical, according to all those same Rules ; for they are rare Metaphors, and which were easily reduced to the natural Sense, by the distinct Idea Men had formed of the Truth, on the simple Expressions, which were much more frequent. That those Metaphors are not continued. That they are explain'd Metaphors. Metaphors not proved. Intelligible Metaphors to all those one spoke to. Metaphors to which they were inclinable by the common Use of the human Language. And lastly, Metaphors which have nothing extraordinary, nor unreasonable, nor surprising.

The Catholics give for Proof of this wide Difference between those Expressions represented by *Aubertin*, as semblable. That the Expressions used by them for the real Presence, have so much the Appearance of simple and natural Expressions, that they have been taken so by the whole Church, according to the Ministers themselves, for five hundred Years successively : When as those they propose as semblable to them, have never been explained by any Body, otherwise than in a metaphorical Sense ; no Body, for Example, have ever imagined that Men are really converted into Brutes, by Avarice ; though *St. Peter Chrysologus* has said it ; nor that Baptism changes truly Men into God, though another Father has spoke in that Manner. So that they must say, that the one have deceived the whole Earth, and the others have never deceived any Body. Which is the most sensible Mark of the greatest Difference which can be imagined.

The Protestants object again, that it is not a Question of the Suppression of a Truth which we have desisted from believing, but of the Introduction of an Error, which was not believed before ; not of the Extinction of the Faith, but of a vicious Augmentation, which has been made to the Faith. The Truth believed is, that the *Eucharist* is a Sacrament, that is to say, a sacred Sign of the dead Body and of the Blood spill'd of *Jesus Christ*. That *that* Truth has always been, and is still believed in the *Roman Church* : But that the new Error is, that the Sign of the Body of *Jesus Christ*, is substantially the Body itself of *Jesus Christ*.

The *Roman Catholics* answer, that this whole Discourse destroys itself ; because, they say, that they have proved already, that the Faithful had necessarily a distinct Belief of the real Presence, or of the real Absence. That if they have believed the real Presence, nothing new has been introduced, since what is believed at present, has always been believed.

And if the real Absence has been believed, the contrary Belief could not have been introduced, but by the Suppression of a Truth which was believed. That distinct Belief of the real Absence of *Jesus Christ*, should have been formally banished, to substitute to it that of the real Presence ; one had been obliged to desist from believing what he believed, and begin to believe what he did not believe. It was believed that *Christ* was absent from the Earth, and one had began to believe that he was not absent from the Earth. It was believed that he was but in Heaven, and we had been obliged to believe that it was false, that he was but in Heaven. It was believed that what was received in the Communion was not the proper Body of *Jesus Christ*, and one had began to believe that it was the proper Body of *Jesus Christ* : So that to use the same Terms of the Protestants, *it had been necessary to condemn one's own first Thoughts, and one's own first notions, which is, in some Measure, renouncing one's self*. And to that Renunciation, should have been joined the Condemnation of the whole Earth, which had necessarily been accused of Impiety ; because she did not acknowledge, nor adore *Jesus Christ* where he is ; and that is what the Protestants confess cannot be done, without Noise, Violence and Convulsions, which cannot be insensible.

The Catholics pretend, besides, that the Protestants do not understand that there is an extreme Difference between Explication of the Faith, and Confirmation of the Faith. They call Explication of the Faith, when it is made to pass from a confuse Idea, to a clear and unfolded one. And that in these Sorts of Explanations, though it be the same Thing in the Bottom, nevertheless the Ideas whereby it is known are different, one being confuse and dark, and the other clear and unfolded.

They call Confirmation of the Faith, when, without adding any Explanation to it, what was always believ'd, is only more positively confirm'd.

They say farther, that it is false that any Thing has been added in the *Roman Church*, to the Faith of the *Eucharist*, as to the Substance by Way of Explanation. That it was always believed in that Church, that *Jesus Christ* was present there, and the *Eucharist* was the Body of *Jesus Christ* ; and that those Words form the same Idea in our Mind, as those us'd at present. That to be present, to be present really, to be present substantially, are absolutely the same Thing ; because a metaphorical Presence, is not a Presence, but rather a true Absence ; and thus it is in no Manner included in the simple Idea which those Words imprint in our Mind ; so that when but a metaphorical Presence is to be conceived, the simple Idea of Presence, must be banished to substitute to it, that of Sign, or of Operation, or of some other which rather includes the Idea of Absence than of Presence. That the sole Difference then, which is between those Expressions of the antient Church : *The Eucharist is the Body of Jesus Christ*, and that of the *Roman Church*, *The Eucharist is really and substantially the Body of Jesus Christ* ; it is not that the one are more explain'd than the other, but it is only that the last are more affirm'd than the first : For when it is said that the Body of *Jesus Christ* is really and substantially in the *Eucharist*, a Reflection of the Mind is added to it, which confirms in a stronger Manner, the Truth of what is said.

Therefore, conclude they, all those pretended Additions and Explications, which the Protestants suppose have been made to the Faith, are Chimera's without Foundation, which they advance without Proofs and without Reason, and which the Catholics have destroy'd by Reason, and very convincing Proofs.

But Protestants say, in their Turn, that it must be observed, that when an Error begins to make any Noise in the World, no Body thinks yet formally to reject it ; for this Reason, that possible Errors being infinite, if our Thought was obliged to reject them actually, even before they have appear'd, Man's Mind would be certainly absorb'd. And hence happens, that

that when an Error appears and forwards itself, it finds Men asleep with Respect to it, so that it is not very difficult for it, either to enter into the Church unperceived, or if it be perceived, to be left to pass unmolested. That thus the Error of Transubstantiation, and of the real Presence, has been introduced softly, and by Degrees, because it was not known, no Body was afraid of it, because no Body had yet felt its dangerous Effects.

The Catholics reply, that this Reasoning is without Solidity, when it is a Question of an Opinion formally opposed to a distinct and positive Belief, spread in the whole Church, and not only in all the Pastors, but likewise in the most simple of all the Faithful; for it can be said, that with Regard to those Errors, Men do not sleep, nor can sleep; because the distinct Opinion they have of the Truth, keep them in a continual Vigilancy against the Errors which are formally opposite to it. But they have proved, say they, that the Faithful must have had a distinct Belief of the real Presence, or of the real Absence; and consequently, they have always been in a State of Vigilancy, against the one and the other of those two Opinions. It has appeared in the eleventh Century (continue they) that the distinct Belief the whole Church had of the real Presence, as *Aubertin* himself is forc'd to confess it, has not kept her asleep, against the Introduction of the real Absence, attempted by *Berengarius*. All the Pastors have presently been alarm'd at it, and have condemned that Error in its Infancy, by several Councils. The positive and distinct Belief of the real Absence, had produced the same Effects against those who had wanted to introduce a real Presence, if the Church had not always believed it.

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common Language of all Antiquity ; it is the Manner of teaching the Simple what they ought to believe of the *Eucharist*.

Aubertin objects to all this, that it is not at all ridiculous, to give to the Passages of the antient Fathers, which are supposed to mark a real Presence, the metaphorical Sense which the *Calvinists* give to it, and endeavours to invalidate the Expressions employ'd by the Catholics to prove the real Presence, by others which are metaphorical ; as when it is said that Men are changed into Beasts by Avarice ; that the Grace of Baptism changes us into a divine Nature ; that Men will be changed into Angels by Death, &c.

To this the Catholics reply, that among all these Examples, *Aubertin* does not propose one, where it is said, that a Sign of Institution is changed into the Thing signified, to shew only that it is made the Sign thereof ; which is properly the Species in Question, since the Protestants want to make them believe, that the Bread is changed into the Body of *Jesus Christ*, that signifies, that it becomes the sacred Sign of the Body of *Jesus Christ*. Therefore, the Catholics pretend, that there is no Need but of common Sense to discover the strange Disproportion of all those Expressions, *Aubertin* compares together. Since the Expressions of the Fathers on the *Eucharist* are such, that they cannot be taken in a metaphorical Sense, according to all the Rules whereby Men distinguish the Metaphors from simple Terms ; when as the Examples proposed by *Aubertin*, contain but Expressions which ought to be taken for metaphorical, according to all those same Rules ; for they are rare Metaphors, and which were easily reduced to the natural Sense, by the distinct Idea Men had formed of the Truth, on the simple Expressions, which were much more frequent. That those Metaphors are not continued. That they are explain'd Metaphors. Metaphors not proved. Intelligible Metaphors to all those one spoke to. Metaphors to which they were inclinable by the common Use of the human Language. And lastly, Metaphors which have nothing extraordinary, nor unreasonable, nor surprising.

The Catholics give for Proof of this wide Difference between those Expressions represented by *Aubertin*, as semblable. That the Expressions used by them for the real Presence, have so much the Appearance of simple and natural Expressions, that they have been taken so by the whole Church, according to the Ministers themselves, for five hundred Years successively : When as those they propose as semblable to them, have never been explained by any Body, otherwise than in a metaphorical Sense ; no Body, for Example, have ever imagined that Men are really converted into Brutes, by Avarice ; though *St. Peter Chrysologus* has said it ; nor that Baptism changes truly Men into God, though another Father has spoke in that Manner. So that they must say, that the one have deceived the whole Earth, and the others have never deceived any Body. Which is the most sensible Mark of the greatest Difference which can be imagined.

The Protestants object again, that it is not a Question of the Suppression of a Truth which we have desisted from believing, but of the Introduction of an Error, which was not believed before ; not of the Extinction of the Faith, but of a vicious Augmentation, which has been made to the Faith. The Truth believed is, that the *Eucharist* is a Sacrament, that is to say, a sacred Sign of the dead Body and of the Blood spill'd of *Jesus Christ*. That *that* Truth has always been, and is still believed in the *Roman Church* : But that the new Error is, that the Sign of the Body of *Jesus Christ*, is substantially the Body itself of *Jesus Christ*.

The *Roman Catholics* answer, that this whole Discourse destroys itself ; because, they say, that they have proved already, that the Faithful had necessarily a distinct Belief of the real Presence, or of the real Absence. That if they have believed the real Presence, nothing new has been introduced, since it is believed at present, has always been believed.

And if the real Absence has been believed, the contrary Belief could not have been introduced, but by the Suppression of a Truth which was believed. That distinct Belief of the real Absence of *Jesus Christ*, should have been formally banished, to substitute to it that of the real Presence ; one had been obliged to desist from believing what he believed, and begin to believe what he did not believe. It was believed that *Christ* was absent from the Earth, and one had began to believe that he was not absent from the Earth. It was believed that he was but in Heaven, and we had been obliged to believe that it was false, that he was but in Heaven. It was believed that what was received in the Communion was not the proper Body of *Jesus Christ*, and one had began to believe that it was the proper Body of *Jesus Christ* : So that to use the same Terms of the Protestants, *it had been necessary to condemn one's own first Thoughts, and one's own first Actions, which is, in some Measure, renouncing one's self*. And to that Renunciation, should have been joined the Condemnation of the whole Earth, which had necessarily been accused of Impiety ; because she did not acknowledge, nor adore *Jesus Christ* where he is ; and that is what the Protestants confess cannot be done, without Noise, Violence and Convulsions, which cannot be insensible.

The Catholics pretend, besides, that the Protestants do not understand that there is an extreme Difference between Explication of the Faith, and Confirmation of the Faith. They call Explication of the Faith, when it is made to pass from a confuse Idea, to a clear and unfolded one. And that in these Sorts of Explanations, though it be the same Thing in the Bottom, nevertheless the Ideas whereby it is known are different, one being confuse and dark, and the other clear and unfolded.

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They say farther, that it is false that any Thing has been added in the *Roman Church*, to the Faith of the *Eucharist*, as to the Substance by Way of Explanation. That it was always believed in that Church, that *Jesus Christ* was present there, and the *Eucharist* was the Body of *Jesus Christ* ; and that those Words form the same Idea in our Mind, as those us'd at present. That to be present, to be present really, to be present substantially, are absolutely the same Thing ; because a metaphorical Presence, is not a Presence, but rather a true Absence ; and thus it is in no Manner included in the simple Idea which those Words imprint in our Mind ; so that when but a metaphorical Presence is to be conceived, the simple Idea of Presence, must be banished to substitute to it, that of Sign, or of Operation, or of some other which rather includes the Idea of Absence than of Presence. That the sole Difference then, which is between those Expressions of the antient Church : *The Eucharist is the Body of Jesus Christ*, and that of the *Roman Church*, *The Eucharist is really and substantially the Body of Jesus Christ* ; it is not that the one are more explain'd than the other, but it is only that the last are more affirm'd than the first : For when it is said that the Body of *Jesus Christ* is really and substantially in the *Eucharist*, a Reflection of the Mind is added to it, which confirms in a stronger Manner, the Truth of what is said.

Therefore, conclude they, all those pretended Additions and Explications, which the Protestants suppose have been made to the Faith, are Chimera's without Foundation, which they advance without Proofs and without Reason, and which the Catholics have destroy'd by Reason, and very convincing Proofs.

But Protestants say, in their Turn, that it must be observed, that when an Error begins to make any Noise in the World, no Body thinks yet formally to reject it ; for this Reason, that possible Errors being infinite, if our Thought was obliged to reject them actually, even before they have appear'd, Man's Mind would be certainly absorb'd. And hence happens, that

that when an Error appears and forwards itself, it finds Men asleep with Respect to it, so that it is not very difficult for it, either to enter into the Church unperceived, or if it be perceived, to be left to pass unmolested. That thus the Error of Transubstantiation, and of the real Presence, has been introduced softly, and by Degrees, because it was not known, no Body was afraid of it, because no Body had yet felt its dangerous Effects.

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Besides this Book, continue they, there was another far more considerable, composed in 1638 by *Meletius Syrigus*, against the Confession of Faith of *Cyril Lucar*, Patriarch of *Constantinople*, printed at *Geneva*, first in *Latin*, and afterwards in *Greek* and *Latin*. The Title of the Writing which has not been printed, is conceived in these Terms: Μελετίου Συρίγου ἱεροῦ μοναχοῦ αὐθιγῆς πρὸς τὴν ἐκδοθεῖσαν ὁμολογίαν τῆς Χριστιανικῆς πίστεως ὑπὸ τοῦ Κωνσταντινουπόλεως Κυριλλου ἐπιγραφείσαν πρὸ νομαλὶ τ' Χριστιανῶν ἀπαύλων τῆς ἀνατολικῆς ἐκκλησίας. They say, that the Author refutes strongly that pretended Confession of the Oriental Church by a great Number of Proofs extracted from the Fathers, and other ecclesiastical Writers, to his Time; and shews evidently, that *Cyril's* Confession has been extracted from the Works of *Calvin*. Then at the End of his Book he adds a particular Dissertation on the Word *μετεσώσις*, or Transubstantiation; and shews by several Examples, that though that Word was not used antiently, it may be us'd at present because of the Hereticks.

The Catholicks say, that they have, besides, in the vulgar *Greek*, two Editions of the Book [of *Agapius*, Monk of the Mount *Atbos*; the first whereof is of the Year 1641, and the second of the Year 1664, at *Venice*, under the Title of ἀμαρτωλῶν Σοτηρία, the *Salvation of Sinners*. That tho' that Author preserves the antient Words μέλατρεπειν, μέλοποιεῖν, he notwithstanding establishes in formal Terms the Belief of the Transubstantiation, and acknowledges that *Jesus Christ has hidden, as under a Veil, his divine Substance, under the Accidents of the Bread and Wine*. Εσκεπασετην Θεϊαν αὐτῆς καὶ υπερλαμπρον ἡσταν μελα ζυμβεβεκοτα καὶ εἰδη ταύια αἶμα καὶ οἶνον.

They also join to the Monk *Agapius*, *Michael Cortacius* of *Creta*, in a Sermon which he pronounced publicly, and dedicated to the Patriarch of *Alexandria*. That Sermon was printed at *Venice* in 1642, under the Title Ομιλία, ὁ λόγος ἐπιδεικτικὸς περὶ τῆς ἀξιομαλῆς τῆς ιερωσύνης, *Discourse on the Dignity of the Sacerdote*. They say that *Cortacius* compares in that Discourse the Priests with God; and says, among other Things, that as *God has changed Water into Wine, likewise the Priests transubstantiate the Wine into the Blood of Christ*. Θεὸς τὸ ὕδωρ οἶνον ἐκάμε καὶ ὁ εἰρεὺς τὸ οἶνον εἰς αἷμα τῆς Χριστοῦ μετέστων. That he disclaims, besides, against the new Hereticks, who do not believe the Truth of that Mystery; and to describe them better, calls *Luther, impious, abominable Heretick, and Apostate, who has seduced by his bad Doctrine an Infinity of Persons*; μιὰρ καὶ ἀσεβέστατ' αἰρετάρχης Λυθερε, ὁ ὁποῖός με διδασκαλίαν οὐκ ἀπ' ὀλικὴν ἀλλὰ ἀποστατικὴν πολλὰς ἐπλάισσε.

Whence they conclude, that they cannot believe that *Mr. Smith* will maintain still, after so many Testimonies to the contrary, that there are but few Authors who have used the Word μετουσίωσις, after the Example of *Gabriel* of *Philadelphia*; and that, on the contrary, they have a greater Reason to say, that there have been but very few who have not used it ever since.

But *Mr. Smith* says, that the two Synods held at *Constantinople* against *Cyril Lucar*, make no Mention of the Word μετουσίωσις; whence he infers, that they have abstained from it, not to appear to favour a Novelty.

The Catholicks, on their Side, say, that this Objection of *Mr. Smith* is without the least Foundation. That it was a Question in those two Synods to condemn the heretical Propositions advanced by *Cyril*, under the Name of the Oriental Church; and as he had used, in his pretended Confession of Faith, the Word μετουσίωσις, or *Transubstantiation*, which, he says, had been invented by the *Latins*, those two Synods have contented themselves with anathematizing the Propositions of *Cyril*, without using his own Terms. These are the Words of the first Synod, held under *Cyril* of *Barrhea*, in 1638. *Anathema to Cyril, who teaches and believes, that the Bread which is on the Altar of the Prothesis, and likewise the Wine, are not changed into the true Body and Blood of Christ, by the Blessing of the Priests, and the coming down of the Holy Ghost*. Ἀναθεμα Κυρίλλῳ δογματῇ, ἔσθ' ἵνα μὴ μεταβαλλεσθαι τὸν ἐπὶ τῆς προθέσεως ἄρτον καὶ ἐπὶ τ' οἶνον διὰ τῆς τῆς ιερῆς εὐλογίας καὶ πνευματικῆς ἀγνῆς ἐπὶ φοιτήσεως εἰς ἀληθινὴν ζῶμα καὶ αἷμα Χριστοῦ. This alone, conclude they, is a convincing Proof, that the Verb μεταβαλλεσθαι, is the same Thing among the *Greeks*, as the new Term μετουσιουσθαι, which answers to the Latin *transubstantiari*, since *Cyril* having used this last, in denying the Transubstantiation, they oppose in the Condemnation of his Proposition, that of μεταβαλλεσθαι. Besides, that the Bishops of that Synod shew evidently which is their Belief with regard to that Mystery, when they anathematise in the same Place this Proposition of *Cyril*, extracted from the 17th Article of his Confession, *what is seen with the Eyes, and receiv'd in the Sacrament, is not the Body of the Lord*.

The Catholicks say farther, that the second Council held at *Constantinople*, under *Parthenius*, in 1642, against *Cyril Lucar*, confirms the Belief of the *Latin*

Church with the same Evidence as the first did. That it condemns *Cyril* for having advanced, with the *Calvinists*, that the divine Eucharist was nothing else but a pure and simple Figure. That the Bishops assembled in that Synod oppose to it, that *Jesus Christ has not said, this is the Figure of my Body; but this is my Body; viz. what is received, what is eaten, what is broken; what has been already sanctified and blessed*. Ἰησοῦς οὐκ εἶπεν τὸτο ἐστὶν τυπικὸν τῆς σαματῆς, μὲν ἀλλὰ τὸτο ἐστὶ τὸ ζῶμα μὲν ὀρμενον καὶ λαμβανόμενον, καὶ εὐλογημένον ἀγιασθέν ἤδη καὶ εὐλογηθέν.

To the other Objection of *Mr. Smith*, that the Word μετουσίωσις, is found neither in the Liturgy nor in the Symbols; and that even in the Liturgy the Bread and Wine are call'd Antitypes after the Consecration, which seems to exclude the Transubstantiation: The Catholicks answer, that nothing can be weaker than that negative Argument, which from a single Word concludes a positive Thing. That if they would oblige the Protestants to abide by their own Principle, which is the Scripture alone, or even to the antient Symbols, they would be much embarrassed. To shew better the Mistake of that Reasoning, they will make use of no other Author against it, say they, but of *Calvin* himself; who in his Institution, where he refutes the Heresy of *Servetus* concerning the Trinity of Persons in God, advances this fine Maxim, that it is lawful to invent new Terms, to explain the Things in a clearer Manner, particularly when one's engaged with Calumniators, who lay hold of Terms to embarrass the Question. *Quid vetat, quo minus quæ captui nostro perplexa, in Scripturis, impeditaque sunt, ea verbis plenioribus explicemus.*—*Hujusmodi autem verborum novitas, tum potissimum usu venit, dum adversus calumniatores afferenda est veritas, qui tergiversando ipsam eludunt.* He adds, that it is in this Manner, that the Church has been obliged to invent the Name of *Trinity* and *Person*. It is to be feared, says *Calvin*, one should be accused of Pride and Presumption, in wanting to reject Names which have not been invented with Temerity. *Quando temere non inventa sunt nomina, cavendum est, ne ea repudiando, superba temeritatibus arguamur.* The Impiety appear'd first, continues the same Author, when the *Arians* began to hate and abhor the Word *Consubstantial*. Which Maxims of *Calvin*, the Catholicks apply, in their Favour, to the Subject in Question. The Church, either *Greek* or *Latin*, had no need to authorise new Terms with regard to the *Eucharist*, while no Body attacked the Truth of that Mystery. The *Latin* Church was the first which made use of it, and even the only one, for several Centuries, because she had *Berengarius* to encounter with; the Oriental Church was not obliged to use that Term, or any other like it, because they had no *Berengarians* among them; but ever since the Knowledge of those Novators has reach'd the East, and they have seen that the Word *Transubstantiation*, invented by the *Latins*, could explain as happily the Change which happens in the *Eucharist*, as their ὁμοσις, explain'd the *Consubstantiality* of the Son with God his Father, they have judg'd proper to use it, and still oftner, ever since the Troubles excited by *Cyril Lucar* in the *Greek* Church. That is, conclude they, in their Opinion the simple and natural Reason, of that Omission of the Word μετουσίωσις, in the antient Books of the *Greeks*.

To the last Objection of *Mr. Smith*, that the Symbols of the Bread and Wine are called Antitypes, even after the Consecration, in the *Greek* Liturgy, and consequently that the *Greeks* are very far, in that, from the Belief of the *Latins*; the Catholicks answer, that *Mr. Smith* appears very little versed in the Theology of the *Greeks*, when he says, in general, that the *Greeks* call the Symbols, Antitypes after the Consecration; since there is no *Greek* at present, and even ever since nine hundred Years, of that Sentiment. That it is certain the schismatical *Greeks* of these Days pretend, that the Consecration is not ended, but after the Prayer called the Invocation of the Holy Ghost, which Prayer is inserted in the Liturgy, after the

Words

Words where the sacred Symbols are called Anti-types. That *Marcus* of *Ephesus*, who was the Chief of the Party against the *Latins* in the Council of *Florence*, makes Use of that very Place of the Liturgy, to prove that the Consecration does not consist only in these Words, *This is my Body*, but likewise in the Prayer or Benediction, which the Priest makes afterwards, in invoking the Holy Ghost. That this Defender of the *Greeks*, supports his Sentiment chiefly on that *St. Basil*, in his Liturgy, calls the Symbols *Anti-types*, after the Priest has pronounced these Words, *This is my Body*, whence he concludes, that they are not yet consecrated, since they retain the Name of Anti-types, or of Figure. That the Patriarch *Jeremiab*, in his Answer to the Theologians of *Wittenberg*, speaks likewise of the *Anti-types* in the same Manner, and assures that those who have called the Bread and Wine *Anti-types*, have give that Name but before the Consecration, εἰδὲ καὶ ἡνὲς ἀντίτυπα τρωμαὶ καὶ αἱμαὶ τρεῦρι τ' ἀρίον καὶ τ' οἶνον ἐκαλήσαν ἡ μέλα το ἀγία σθνας.

They say, besides, that these Authors speak in this, the Language of the other *Greek* Authors, ever since the eighth Century, where that Question was agitated in the second Council of *Nice*. That the Deacon *Epiphanius* declared in that Council, in the Name of all the Bishops, that the Word *Anti-types*, could not be understood otherwise, than in the Liturgy of *St. Basil*, for the Gifts after the Consecration, and that after the Consecration, they were called the Body and Blood of *Jesus Christ*, περ τε ἀγίασθη αἱ ἐκλήθη ἀντίτυπα μέλα δε του ἀγιασμον σωμακυρι καὶ αἱμαλεσόναι. That ever since all the *Greeks* speak the same Language, and that notwithstanding the Difficulties happened on that Word *Anti-type*, to know if the *Greek* Fathers have applied it to the *Eucharist* after the Consecration, or not, it is certain that those of the antient Doctors of the Church, who have given the Name of *Anti-types* to the Symbols after the Consecration, were not of Opinion, that that Word contained in itself any Thing opposite to the Truth of the Body of *Jesus Christ* in the *Eucharist*; and that it can be manifestly proved by the Dispute which was between the *Iconoclastes*, and the Defenders of Images, that there was no Difficulty between them, touching the Body of *Jesus Christ*, which both Parties acknowledge equally to be in the *Eucharist* after the Consecration.

But *Mr. Smith*, who had represented *Gabriel* of *Philadelphia*, as the Author of the Word μέλισσις, finding that the Catholics endeavour to prove, on the Evidence of *Melecius Syrigus*, that the Patriarch *Gennadius*, had used the same Term, a hundred Years before *Gabriel* of *Philadelphia*, assures us, that *Gennadius* could never have wrote, what *Melecius Syrigus* attributes to him, for the following Reasons.

Is it credible, says he, that *Gennadius* had employ'd in his Writings the Word μέλισσις, and that so many others who have lived after him, had abstained entirely from it? *Jeremiab*, who was one of his Successors in the See of *Constantinople*, and a learned Man, has, without doubt, seen the Writings of his Predecessor, he has consulted the Archives of his Church, why then, has he not used the same Word, if it was true that *Gennadius* had already used it? It is in vain, continues *Mr. Smith*, that one would pretend to find in the Works of *Germain* of *Constantinople*, and of *John* of *Damascus*, the Word μέλισσις, since that of *Transubstantiation*, was not yet known among the *Latins*; neither is it found in the Books of *Nicolas Cabasile*, of *Simeon* of *Thessalonica*, of *Barlaam* of *Manuel Calcas*, and of *Bessarion*.

Mr. Smith acknowledges, that *Gennadius* is the same who was called *George Scholarius*, and who appeared inclined to Peace in the Council of *Florence*. He attributes to him the Discourse he made to the Sultan *Mahomet*, touching the principal Articles of the Christian Belief; but he says at the same Time, that the Testimony produced by the Catholics, is not extracted from that Discourse; though he confesses that the same *Gennadius*, has composed several other Works

which have not been rendered publick; but he pretends at the same Time, that *Possevin* and *Allatius*, who have made a careful Collection of the Works of that Patriarch, especially *Allatius*, in a Dissertation intitled *De Georgiis*, had not the least Knowledge of that Piece of *Gennadius*, produced only by a miserable *Greek*, called *Melecius Syrigus*, a great Partisan of the Pope, and who, in all Appearance, had been educated in the College of the *Greeks* at *Rome*. Besides, how can it be possible, that *Cariophilus* had not opposed that Testimony of *Gennadius* to *Gargan*, in his Refutation of the Catechism of that Author? If the Book of *Syrigus* was considerable, why is it kept close, without giving it to the Publick? There is, besides, Room to suspect the Integrity of that Author, who may have put the Name of *Gennadius*, in the Room of some miserable Author; or, perhaps, wanted to give us his own Sentiments under the Name of *Gennadius*; since the Doctrine of the Transubstantiation of the *Latins*, was not yet so well known among the *Greeks* at the Time of *Gennadius*, as it appears in the false Piece published by *Syrigus*; since there are found in it, Terms which are purely of the School, and which were not yet come to the Knowledge of the *Greeks* in that Time.

To this the Catholics answer, first, that *Mr. Smith* could very well have omitted the Names of *Germain* of *Constantinople*, and of *John* of *Damascus*, since the Word *Transubstantiation*, was not yet in Use among the *Latins*, from whom the *Greeks* have borrowed their Word μέλισσις, neither was it necessary to produce the Names of *Nicolas Cabasile*, of *Simeon* of *Thessalonica*, of *Manuel Calcas*, of *Barlaam*, and of *Bessarion*, since the Case in Question does not depend on them, but only on *Gennadius*. That though those Authors do not employ in their Books, the Term μέλισσις, they, notwithstanding, acknowledge the Thing signified by that Word. That if the Reasoning of *Mr. Smith*, was concluding, he would prove, likewise, than an Infinity of Authors of the *Roman* Communion, do not believe the *Transubstantiation*, because they do not use that Word, and content themselves with that of Change of Substance, which is the same: So that all these Proofs purely negative of *Mr. Smith*, conclude nothing. That with Regard to *Jeremiab* who succeeded *Gennadius*, not immediately, but after several other Patriarchs, they confess that he has consulted the Archives of the Church of *Constantinople*, but that it was not necessary he should have used the Word μέλισσις, as *Gennadius* had done. That it was sufficient to establish manifestly the Thing, in his Answer to the Theologians of *Wittenberg*, without using a Word which could not enter but in a Discourse, where the Expressions are entirely scholastical. That there is even a very great Appearance that the Piece produced by *Syrigus* under *Gennadius*'s Name, was not in the Archives of *Constantinople*, because *Gennadius* had wrote Part of his Letters in a Monastery he had chosen for a Retreat, after he had abdicated the Patriarchate.

Secondly, that if *Possevin* and *Allatius*, who *Mr. Smith* pretends have made a curious Research of the Works of *Gennadius*, make no Mention of this Piece attributed to him by *Syrigus*, it is because those two Authors knew little or nothing of that *Gennadius*, otherwise called *George Scholarius*, being both persuaded that *Scholarius* who has wrote several Things against the *Latins*, has never been Patriarch of *Constantinople*. *Allatius* has composed on that Prejudice, which was false, his Dissertation *De Georgiis*. If he had read the Manuscripts of *Gennadius*, which are in the King of *France*'s Library, or if he had even made the least Reflection on what we have of *Greek* Historians printed, who speak of that Patriarch, he had not fallen into those Errors of Fact. That as to the Jesuit *Possevin*, he has contented himself to indicate in his *Apparatus*, some Manuscripts of *Gennadius*, on the Memoirs which had been furnished to him from some Libraries; and being prejudiced in the same Manner *Leo Allatius* was, he finds Fault that the Patriarch *Gennadius* does not say that the Holy Ghost proceeds from the Father and from

from the Son; which makes him believe that the Discourse of the Patriarch *Gennadius* has been corrupted by the *Greeks*. Notwithstanding, to hear Mr. *Smith* speak, say they again, these two zealous Defenders of the *Roman Church* have had a very great Knowledge of the Works of *Gennadius*.

The Catholics pretend that what has thus embarrassed the History of *Gennadius*, are, that his Works are marked under different Names. For he is sometimes called *George Scholarius*, Γεωργίου ὁ Σχολαρίου, which is his first and true Name, and sometimes *Gennadius*, Γενναδίου, which is the Name he took when he made himself a Monk, and which he kept after his Promotion to the Patriarchate. He is called sometimes *Gennadius* and *Scholarius*, Monk, Γενναδίου μοναχὸς ὁ Σχολάριος, because he has been, in Fact, a Monk, before and after his Patriarchate. Therefore his Works are found with the Title of *Gennadius, Scholarius, Monk and Patriarch*. Γενναδίου ὁ Σχολάριος μοναχὸς καὶ πατριάρχης.

They pretend also, that in the first Part of that Act related by *Meletius Syrigus*, in his Book against *Cyril Lucar*, there are Circumstances which prove manifestly, that it could not be written by any Body else but by *Gennadius*; which they prove by publishing that first Part, thus.—Some Questions had been proposed to that Patriarch, say they, on the *Eucharist*, to which he had already answered; therefore he declares in his second Letter, which they relate after *Syrigus*, that he will answer more at length; for he begins thus: *Having heretofore answer'd to your Questions, on the mystical Body and Blood of our Lord Jesus Christ, we answer again more at length.* Ἐπειδὴ περὶ τοῦ μυστηρίου τοῦ Σώματος καὶ αἵματος τοῦ κυρίου ἡμεῶν Ἰησοῦ Χριστοῦ προχειρῶς πρῶτον ἀπεκρίναμεθα πρὸς τοὺς ὑμετέροισιν ἐρωτήσιν νῦν πάλιν πλεονέστερον ἀποκρινομένη. He treats afterwards of the natural Body of *Jesus Christ* and of his mystical Body. But as the only Question in this Place is to know, if that Piece be of *Gennadius* or not; the Catholics, who are for the affirmative, alledge several Instances to prove it; viz. that no Body could say as he has done, *that he had already pronounced a Sermon on the same Subject, the Day of the Parasceve of Lazarus, in that unfortunate Palace before the Emperor, the Senate, and the most illustrious Persons of the City.* Καὶ ἡμεῖς ποτε ἐν τῷ οὐκυχεὶ παλατίῳ ὡμιλήσαμεν κατὰ τοῦ παρὰσκευῆν τοῦ Λαζάρου περὶ τοῦ μυστικοῦ Σώματος τοῦ δεσποῦ τοῦ Χριστοῦ εὐωπίου τοῦ βασιλέως καὶ τῆς συνέλευτος καὶ τῶν ἐξαίρετων τῆς πόλεως. We learn from the Manuscript Preface found at the Head of his Works, say they, that *George Scholarius* preached every *Friday* in the Palace, in Presence of the whole Court: And when he calls in that same Letter the Palace of the Emperor, an unfortunate Palace, he thereby gives us to understand, that *Constantinople* was then possessed by the *Turks*, and that his Name was then *Gennadius*.

But Mr. *Smith* is of Opinion that this Letter of *Gennadius* is apocryphal, and forged by *Meletius Syrigus*, whom he calls a *Greek* of no Merit, entirely devoted to *Rome*, where he had been educated. The Catholics, on their Side, endeavour to clear *Syrigus* of those scandalous Aspersions, and pretend that *Meletius*, when he publish'd the Epistle of *Gennadius*, was Protosyncelle and Doctor of the great Church of *Constantinople*; that he was chosen once in a Synod by his Patriarch to go into *Moldavia*, in the Quality of Exarch, or principal Deputy, to examine a Confession of Faith composed by the Clergy of *Russia*, and which was afterwards adopted by all the *Greek Churches* of the East, as their true Belief. That Confession was afterwards printed in *Greek* by the *Dutch*, at the Solicitation of *S. Panagioti*, first Interpreter of the *Porte*. There appears at the Head of that Book a very authentic Approbation, of *Nestarius*, Patriarch of *Jerusalem*, and of all *Palestina*, where he speaks very much in Praise of *Meletius Syrigus*, whom he calls *Doctor of the great Church, Preacher, Interpreter, and the Rule of the true Dogma's of the Faith.* Μινετιος ὁ Σύριγος διδασκαλὸς τῆς μεγάλης ἐκκλησίας κηρύξ, καὶ διερμηνεύς, καὶ ἑαθμὴ τῶν ὁρθῶν τῆς πίστεως δογμάτων καὶ ἱστορίας.

καὶ λέγεται. That far from being of Sentiments different from those of the Eastern Churches, *Nestarius* assures us that *Syrigus* has been educated from his Infancy in the common Belief and Piety. That nothing shews more his Erudition than the excellent Work he has composed against the pretended Confession of Faith of the oriental Church published by *Cyril Lucar*, where in his Epistle to the Readers, which is at the Head of his Book, he complains of the great Disorders the Heresies have caused in the World; and speaks afterwards of the Confession of Faith, which those of *Geneva* had caused to be printed, and had been sent into the *Levant*; which Confession contains, in his Opinion, the pure *Calvinism* under the Name of the Oriental Church; he confesses that he caused much Confusion among the *Greeks*, who thought that *Cyril* was truly the Author thereof; that, notwithstanding several Persons have denied its being his Work, that he dare not pronounce decisively on that Subject; leaving to God the Judgment thereof, who knows what is the most hidden in our Hearts. καὶ οὕτως ἐκείνην τὴν περὶ τούτου ψήφου σθεῶν τῶν ταῦν κρυφία τῆς καρδίας ἐκάστου εἶδοτι καταλείψαντες, τὰς αὐτῶν τὴν κρίσιν ποιούμενοι πρὸς τὰ σύγγραμματα, εἴτε ἐκεῖνος εἴνῃ ὁ ταῦτα συντεθῆκως, ἢ καὶ ἕτερος.

After this Letter he comes to the Preface of his Book, where he pretends that *Cyril* was in the wrong to call his Confession, *The Religion of the Oriental or Greek Church*, since of the four Patriarchs of that Church there is not one who does not condemn it as heretical. The Faith of the Orientals, says he, is not new; but is founded on the antient Symbols, on the Definitions of the seven general Councils, and on the common Belief of the Fathers in every Century.—When he comes to the Article of the *Eucharist* (which is the 17th of his Book) he opposes (say the *Roman Catholics*) in a very clear Light, the Heresy of the *Calvinists*, whereof *Cyril* had declared himself the Defender, and exposes it strenuously, assuring that *Jesus Christ* is present in the sacred Ministries, and eaten there corporally, not only in Spirit by Faith, but that he is offered by the Bread sensibly to those who receive him. Σωματικῶς καὶ μὴ διὰ πίστεως νοητῶς, ἀλλὰ ἀδιακρίτως αἰσθητῶς προσφέρεσθαι τοῖς αὐτοῦ προσιέμενοις. He comes afterwards to the Objections of the *Calvinists*, abstracted from the Scripture, which he refutes in the same Manner, the *Latins* have done it. He employs the rest of his Book to give us a long Sequel of Passages of the Fathers of every Century, from the Time of the Apostles to that of the Patriarch *Gennadius*, who is the last Witness he produces to shew, that the Church has always believed what she believed then of the Sacrament of the *Eucharist*. He quotes for the first Century a Passage of *St. Ignatius*, taken from *Theodoret*, and *Denis the Areopagite*; for the second, *St. Justin* the Martyr, and *St. Irenaeus*; for the third, *Tertullian*, *Origen*, and *St. Cyprian*, and continues thus through all the other Centuries.

Mr. *Smith* asks, why, if that Work of *Syrigus*, is so considerable, as pretended by the Catholics, it has been left buried in the Cell of a Monk; and why it has not been printed? The Catholics answer, that if that Book is unknown to Mr. *Smith*, it does not follow hence that it has remained hidden. That it was publick among the *Greeks* of *Constantinople*, where *Syrigus* made another Figure than that of a Monk; and that if *Meletius Syrigus* had been more favourable to the *Calvinists* he had not been thus maltreated by Mr. *Smith*.

Mr. *Smith* arraigns also, the Merit and Capacity of *Gabriel of Philadelphia*, whom he considers as the Inventor of the Word μετασυστοις. There are so many Ineptics in that Writer, says he, that it can be said, without doing him Wrong, that he had no Judgment. Tot tricie ineptieque, ut judicii facultatem, quā homines maxime sumus, aut nullam, aut prorsus imbecillam omnino fuisse, citra omnem invidiam & odium, quippiam merito dicat.

The Catholics retort Mr. *Smith's* Argument, by pretending, in their Turn, that himself shews very he-

the Judgment in disclaiming, and loading with Invectives a good Archbishop, who exposes faithfully the Doctrine of his Church, and has even wrote Apologies for it. They say, besides, that if Mr. Smith had been pleased to mark in Detail, what displeases him so much in *Gabriel of Philadelphia*, they would have shewed him that the very same Things are found in *Simeon of Thessalonica*, whom *Gabriel* has often copied, and in other *Greek Writers*, who cannot be accused of Weakness of Mind; that his Apology, where he defends a Ceremony which some *Latins* had condemned of Idolatry, shews sufficiently enough that he wanted neither Wit nor Judgment. But that Work displeases much the Protestants, because he establishes there in an invincible Manner, not only the Transubstantiation, but likewise the Adoration of the Symbols, of the Bread and Wine, after the Consecration; that he supposes it as a Thing in Use, and which was practised generally in the *Greek Church*. That notwithstanding what Mr. Smith can alledge against him on that Account, the Praises of that Prelate can be seen in the *Turco Græcia* of *Crusius*, gain'd from the Protestants themselves, who had known him at *Constantinople*, where he had been consecrated Bishop of *Philadelphia*, by the Patriarch *Jeremiah*. That the Author of the Preface, which is at the Beginning of the *Greek Opuscles*, printed in *England* against the *Latins*, and which is address'd to the four Patriarchs of the East, rank *Gabriel* among those zealous Heroes of his Nation, who have wrote against *Rome*, and speak of him in this Manner. *Gabriel Severus of Monembasia, established by the Assistance of the Holy Ghost, true Archbishop of Philadelphia, and who is the first who has established a Church of Orthodoxes in the Territory of Venice*, ὁ ἐκ Μονεμβασίας Γαβριήλ ὁ Σεβηρος ὁ χειροτονία τῶ παύλαρι πνευματικὸς ἀρχιερεὺς γνήσιος φιλαδελφίας καλῶς αὖς καὶ πρώτος ἐν ταῖς κλιναῖς ἐνέλιαις ἐκκλησιασίου τῶν ὀρθοδόξων πηξάμενος.

Mr. Smith objects farther, that none have been produced for Defenders of the Word *μειουσιωσις*, but Writers who had neither Reputation, nor Authority among the *Greeks*; Monks, who, in his Opinion, are always great Admirers of Novelties, and had been educated by the Court of *Rome*, for the Ruin of the *Greek Church*, *Scriptores nullius famæ, & existimationis, nullius meriti, nullius apud suos authoritatis, multo minus Monachos νεοεργιστοὺς, & Romanis artibus pro ratione instituti, & educationis in Græcæ ecclesiæ perniciem instructos*, Smith, in *Misc. p. 25*. He wants Bishops, and other considerable Persons among the *Greeks*, either for their Erudition, or Dignity; and complains that instead of it, none have been oppos'd to him, but three miserable modern *Greeks*, who have wrote after the Confession of Faith of *Cyril Lucar*.

To this the *Roman Catholics* reply, that they do not conceive how Mr. Smith can say, but miserable *Greeks*, without Capacity or Character, have been oppos'd to him. That if it could even be supposed that *Gregory Protosyncelle*, *George Croteffius*, Theologian of the great Church, the Monk *Agapius*, and *Michael Cortacius* were such, as he had been pleas'd to represent them; they ask if he could have found any Thing to object against those illustrious *Greeks* who have approved in so authentick a Manner, the Book intitled, *Orthodox Confession of the Catholick and Apostolical Church of the East*? Ὀρθόδοξος ὁμολογία τῆς καθολικῆς καὶ ἀποστολικῆς ἐκκλησίας τῆς ἀνατολίας. There are seen at the Head of that Book (say they) the four Patriarchs of the East, who represent the whole *Greek Church*, with some Bishops, and several great Officers, whose Names are these: *Parthenius*, by the divine Providence, Archbishop of *Constantinople*, the new *Rome*, and œcumenical Patriarch. *Joannicius*, by the divine Providence, Papas, and Patriarch of the great City of *Alexandria*, and Judge of the World. *Macarius*, by the divine Providence, Patriarch of the great Theopolis of *Antioch*. *Paisius*, by the divine Providence, Patriarch of the holy City of *Jerusalem*. After these four Patriarchs follow the Names of some Bishops, who are, *Laurencius*, of *Ancyra*; *Gregory* of *Larissa*; *Pachanius* of *Chalcedon*, *Parthenius* of *Adria-*

nople, *Joannicius* of *Berrhæa*, *Meletius* of *Rhodes*, *Cornelius* of *Methymne*, *Gabriel* of *Lacedemon*, *Parthenius* of *Chio*. Lastly, to these Bishops are joined *Lascarius*, grand Sagothetes of the great Church; *Chritodulus*, grand Œconomist of the great Church; *Michel*, grand Rhetor of the great Church; and several other *Greeks* of Consideration.

Mr. Smith himself quotes this Book, and confesses that the *Greeks* of these Days acknowledge the Transubstantiation in the same Manner the *Latins* do it, either for the Word, or for the Thing; as it appears, says he, by a Book intitled *Orthodox Confession*, and by a new Synod of *Jerusalem*; but adds, at the same Time, that Time which discovers all Things, will let us know, one Day or other, the Artifices used to impose in that on the *Greeks*: And says further, that the *Greeks* who have authoris'd the Transubstantiation, in their Books, are posteriors to the Confession of Faith of *Cyril*.

The *Catholicks* answer, that it matters not, if they have been before or after *Cyril*. That they have produced some who have preceded him, and others who have been after him. That the Conformity of the one with the other, proves invincibly that they have all, with an unanimous Consent, approv'd the Transubstantiation, in the Manner it is explain'd by the *Latins*. That the Proof thereof is become stronger, ever since *Cyril* has publish'd his Confession of Faith; because that Question has been oftner brought on the Tapis, and put in a clearer Light. That *Cyril* has been condemn'd by the whole *Greek Church*, according to the Sentiments they were in, before the Publication of *Cyril's* Confession.

They say further, that this Agreement of the *Greek Church* with the *Latin*, is so evident, that even Protestants themselves, viz. those who profess Justice and Impartiality, will not contradict it. That *William Forbesius*, Bishop of *Edinburgh*, one of the most learned of the *English* Protestants, who had travelled throughout all *Europe*, in the Book he has wrote, under the Title of modest and pacifick Considerations, on Controversies of the Sacrament of the *Eucharist*, *Lib. 1. c. 4*. speaks in this Manner, with regard to the Sentiments of the modern *Greeks* on the Transubstantiation: That same Opinion of the Transubstantiation was received a long while ago by a great Number of Persons, though not by all, (an Exception, say the *Roman Catholics*, which must not appear strange in a Protestant) and is still defended, not only in the *Latin*, but likewise in the *Greek Church*, as it appears by the *New Greeks*, without mentioning the *Antients*; by the *Orthodox Treasure* of *Nicetas*; by the *Panapolia* of *Euthymius*; by *Nicholas Bishop* of *Methone*; by *Samonas Bishop* of *Gaza*; by *Nicholas Cabasylas*; by *Marcus* of *Ephesus*, and *Bessarion*, who all confess very openly the Transubstantiation in their Works. Likewise in the Council of *Florence*, it was not question'd if the Bread was changed substantially into the Body of *Jesus Christ*, though *Kernitius* and other Protestants are of that Opinion; but by which Words that ineffable Change was operated; if it was only by the Words of the Lord, or if the Prayers of the Priest and the Church were to be joined to them. *Jeremiah*, Patriarch of *Constantinople*, in the Censure of the Confession of *Augsborg*, c. 10. Several Things are said of you on that Subject, says he, which we can by no Means approve. The Doctrine of the Holy Church is, then, that in the sacred Supper, after Consecration and Benediction, the Bread is changed, and passes into the Body itself of *Jesus Christ*, and the Wine into his Blood, by the Efficacy of the Holy Ghost: And a little lower, When *Jesus Christ* gave the Communion to his Disciples, he gave them the Flesh he wore, and the Blood he had in his Body. Not that in the Administration of the divine Mysteries, the Body of *Jesus Christ*, which ascended into Heaven, comes down from it; for it would be Blasphemy to say it: But the Matter of the Sacrament is changed, and transformed by the Grace of the Holy Ghost; and the Invocation of him who operates and consummates the Sacrament into the true Body of the Lord. That was done in the Supper which

which Jesus Christ made to his Disciples, and that is done in ours. And afterwards the true Body of Jesus Christ is contained under the Species of the leavened Bread.

That he proves the same Thing by the Answer of the Greeks to the Questions of the Cardinal of Guise, printed at Basil in 1571, and says, that a few Years before, in a Conversation with a Greek Bishop, who was learned enough; he maintained the Transubstantiation in a clear Manner, and proved it by St. Chrysostom, *clarissime confitebatur, & ex Chrysostomo tueri conabatur.*

That he quotes afterwards the Testimony of Gaspar Pucirus, a famous Historian and Physician, and of Sandius, an Englishman, in his Mirror of Europe, p. 233. where he says clearly, that the Greeks are agreed with the Romans on the Transubstantiation, on the Sacrifice, and on the whole Body of the Mass. Of Poterus and of Petrus Arcadius.

Therefore I am not a little surprized, says he, that the Bishop Thomas Morton, in the third Book he has made of the Sacrament of the Eucharist, denies that the Patriarch Jeremiah has believed the Transubstantiation; and that to prove it he alledges these Words extracted from the Acts of the Theologians of Wittemberg, with the Patriarch Jeremiah. *Non enim his nominis tantum communicatio est, sed rei identitas & enim vera corpus & sanguis Christi mysteria sunt, non quod hæc in corpus humanum transmutentur, sed nos in illa melioribus prævalentibus.* For Jeremiah does not deny, says Forbesius, in that Passage, the Transubstantiation of the Bread into the Body of Jesus Christ, but the Transubstantiation of the Body and Blood of Jesus Christ, into a human Body, according to what St. Augustin says, *Non tu te mutabis in me, sed ego mutabor in te.*

For my Part I am of Opinion, that if both Parties (I mean the Roman Catholicks) would renounce for some Time their Prejudices, and a certain Animosity which subsist among them; and weigh on one Side the Strength and Energy of the Word of Christ, when he instituted this divine Sacrament, *This is my Body, This is my Blood*, which Words are so expressive of themselves, or so clearly significative, as in all Appearance, to admit of no Metaphor, or Amphibology; and on the other, the Incomprehensibility of that Mystery, which is infinitely above a human Apprehension, otherwise it would not be a Mystery. Were they to consider seriously on one side, that that sacred Food is only prepared for the Nourishment of our Souls, which is a spiritual Substance, and consequently wants no other but a spiritual Food; and on the other, that a glorified Body, which is immortal, impassible, and has all the other Qualities essential to a spiritual Substance, without the least of the Infirmities inseparable from human Nature, cannot exist in any other Manner but in that of a spiritual Substance, which admits of no Ubiquity; there would be soon a just Understanding between the Catholicks and Protestants on that important Subject: But each Party abounds in his own Sense, and the one would submit that profound Mystery to Reason, while the others endeavour to prove it incomprehensible.

There are several other Points controverted between the Catholicks and Protestants, with regard to the Eucharist; the Principal whereof is the Celebration of the Eucharist, which the Catholicks believe a Sacrifice, and the Protestants deny it; and the Communion under both Kinds.

To state clearly the first Question, viz. If the Celebration of the Eucharist, which the Catholicks call Mass, be a Sacrifice. We must observe first, that a Sacrifice is an outward Worship, rendered to God alone, and proceeding from an inward Affection. There are five Things required to this Worship, viz. 1. The Minister who offers the Sacrifice. 2. The Matter of the Sacrifice. 3. The Form. 4. The Place. 5. The End of the Sacrifice. The Minister of the Sacrifice is the Priest. The Matter, is the Thing offered to God. The Form is the Consumption, or Mutation of the Thing offered. The Place, where the Sacrifice is offered, is the Altar: And there

may be four Ends of a Sacrifice. 1. The Acknowledgment of the supreme Authority which God has over us. 2. Thanksgiving for the Benefits we have received from him. 3. Asking for new Favours. 4. The Expiation of Sins. Hence are commonly distinguished four Sorts of Sacrifices. 1. The *Latreutick*, whereby we declare ourselves Servants of God, to whom we are indebted for all we have. 2. The *Eucharistick*, whereby we shew our Gratitude for the Favours we have received. 3. *Impetratory*, whereby we ask new Favours. 4. *Propitiatory*, whereby we endeavour to appease God, that he may forgive us our Sins.

Therefore, say the Roman Catholicks, as we may consider Man in three different States or Conditions, from the Beginning of the World to our present Time, viz. the State of Nature, the State of Moses's Law, and the State of Grace, or of the Gospel. Hence we distinguish three Sorts of Sacrifices; those of the Law of Nature, those of the Law of Moses, and those of the Law of the Gospel.

In the Law of Nature, there have been the Sacrifices of Abel, Noah, Abraham, Melchisedech, Jacob and Job.—In the Law of Moses, there have been Victims, Libations, and Immolations. Likewise *Holocausts* Victims for Sins, and pacifick Victims.—And in the Law of the Gospel there are two Sacrifices, a bloody one, whereby Christ has been offered on the Altar of the Cross, to God the Father, for the Expiation of our Sins; and another unbloody, whereby the same Christ is offered every Day on the Altar, under the Species of the Bread and Wine.

These Things presupposed, continue they, the Question is, if the unbloody Sacrifice, which we call the Sacrifice of the Mass, be properly and truly a Sacrifice. Themselves answer this Question in the Affirmative, and endeavour to prove their Assertion in various Manners. First, from the Types or Figures of the Old Testament; secondly, from the Prophecy of Malachi; thirdly, from the Conversation of Christ with the Woman from Samaria; fourthly, from the Apostle St. Paul; and fifthly, from the unanimous Consent of the antient Fathers; and form of all these Testimonies, as many Arguments.

Their first Argument is this: In the Old Testament, say they, there have been three very considerable Figures or Types of the Celebration of the Eucharist. 1. The Oblation of Bread and Wine made by Melchisedech. 2. The Celebration of the Paschal Lamb. 3. The perpetual Sacrifice; which three Figures were true Sacrifices. Therefore the Celebration of the Eucharist is a true Sacrifice. They prove the Consequence by that the Shadow or Figure is more imperfect in its Kind, than the Things it represents: And therefore, to be a Sacrifice, was a sort of Perfection in the Type or Figure of the Celebration of the Eucharist, which must be far greater in that Celebration.

Their second Argument is taken from the Prophet Malachi; who foretold, Chap. i. 11. *That from the rising of the Sun even unto the going down of the same, and in every Place, Incense and a pure Offering would be offered to the Lord*; they ask, what could be that pure Offering, mentioned by the Prophet, but the Body and Blood of Christ under the Species of the Bread and Wine? as the antient Fathers have interpreted it.

Their third Argument is, from the Conversation of Christ with the Woman of Samaria: Where he tells her, that the Difference between the Judaical, Samaritan, and Christian Sacrifice, is, that the Judaical and Samaritan Sacrifice have been fixed to a certain Place, but the Christian Sacrifice will be offered throughout the whole Earth. He says, besides, that the two former were imperfect, but the third is to be a perfect Sacrifice. Therefore, conclude they, the Christians have a Sacrifice, properly so call'd, which can be offered every where; which Sacrifice is not the bloody one of the Cross, which has been offer'd but once, and but in one Place; consequently it must be the unbloody Sacrifice of the Eucharist, which is offer'd every Day, and every where.

Their

Their fourth Argument is from the Apostle St. Paul, 1 *Corinth.* x. 19. where he distinguishes three Sorts of Tables or Altars: One where the Gentiles sacrifice to the Idols or Devils: The other where the Jews offer Victims to God from among Animals: And the third where the Christians offer the Body and Blood of Christ, under the Species of the Bread and Wine: But wherefore? to prove that the *Corinthians* must abstain from the Flesh which has been offered to Idols; which he does in this Manner. He who eats of the Victims which have been offered to Idols, becomes Partaker of an idolatrous Sacrifice, and consequently is an Idolater. But you who are Christians, ought not to be Partakers of an idolatrous Sacrifice, nor Idolaters. Fly, says he, from Idolatry. He confirms the Major by a Similitude: Because Christians who takes the Body and Blood of *Jesus Christ*, are Partakers of the Altar and Sacrifice of Christ; and the Jews who eat the *Mosaical* Victims, are Partakers of the *Mosaical* Altar and Sacrifice. Likewise those who eat of the Things offer'd in Sacrifice to Idols, are Partakers of an idolatrous Altar and Sacrifice: But no Body can be Partaker of the Lord's Table, and of the Table of Devils; therefore if you will be Partakers of the Altar of Christ, you must abstain from the Altar of Idols.

They take their fifth Argument from the antient Fathers, who, say they, speak so clearly of the Sacrifice of the *Eucharist*, that no Body can doubt of their Sentiments on that Subject: Which they endeavour to prove in several Manners. First, Because the Fathers make use of the Terms, *Sacrifice, Oblation, Victim, to offer, to sacrifice, to immolate.* Secondly, They want Altars for the Celebration of the *Eucharist*; and Altars are not erected but for a Sacrifice. Thirdly, They call the Ministers, who offer the *Eucharist*, Priests; and the chief Office of Priests is to offer a Sacrifice, *Heb.* v. 1, 3, 8. Fourthly, They say that *Melchisedech* has been a true Priest, who has offered Bread and Wine in Sacrifice, and thereby has represented the unbloody Sacrifice which Christ instituted under the Species of Bread and Wine, at his last Supper; for which Reason Christ is called in the Scripture a Priest, according to the Order of *Melchisedech*. Lastly, they interpret the Prophecy of *Mala. chi*, heretofore mentioned, of the Sacrifice of the *Eucharist*. The Catholics say, that it is not necessary to quote the Passages of the Fathers on that Subject, since even their own Enemies confess, that the Fathers agree in this with the Catholics, especially *Luth. in lib. de Missa privatâ. Calvin, lib. 4. institut. c. 19. §. 1. 12. Kemnitius, in exam. concil. Trident.* and others.

The Protestants object, against this Sentiment, that a Sacrifice must be offered to God, and not eaten by Men; that the *Eucharist* is eaten, and consequently is not a Sacrifice.

The Roman Catholics answer, that the last Part of the Major, or this Argument, *viz.* that a Sacrifice is not eaten by Men, is false; for the Paschal Lamb was a true Sacrifice; and notwithstanding was eaten by the *Hebrews*: Likewise, the Peace-Offerings were Sacrifices; and Part of it was apply'd to the Use of the Priests, and of those who offer'd them.

The Protestants object farther; that what is a Sacrament cannot be together a Sacrifice; that the *Eucharist* is a Sacrament, and therefore cannot be a Sacrifice. They prove the Major by the Opposition which is between a Sacrament and a Sacrifice; for in a Sacrament we receive something from God; and in a Sacrifice we give something to God; when as the Manner of the Accepted, and that of the Given cannot be consistent in one and the same Thing.

The Answer of the Roman Catholics to this Objection is, that the Major is false, even in the Opinion of their Adversaries, for *Plessis Morné, a Calvinist, Lib. 12. de Eucharist. c. 1.* says expressly, that the Paschal Lamb was both a Sacrament and a Sacrifice; which is likewise the Sentiment of St. Thomas, and of several other Scholastics, notwithstanding that in the

Sacrament we receive something from God, and in the Sacrifice we offer something to God; because those two Things may be consistent together, as is evident in the Paschal Lamb. For if it was not licit to offer to God what we receive from him, there would be no Sacrifice, according to this Passage, the first of *Chronicles* xxix. 4. *For all Things come of thee, and of thine own have we given thee.*

The third Objection of the Protestants is, that Christ, when he instituted the *Eucharist*, did not say *offer*, but *eat*, and *drink*, therefore the *Eucharist*, by Christ's Institution, is not a Sacrifice, but only a Sacrament.

To this the Catholics answer, that tho' Christ, in the Institution of the *Eucharist*, did not use the Term *offer*, he nevertheless used another equivalent to it; when he said, *Do this in Remembrance of me*; that is to say, after this, you must celebrate the *Eucharist* which I have now instituted, for a Thanksgiving in Remembrance of my Death, which I am going to suffer for you and all the human Race.

The fourth Objection is, that Christ is Priest to all Eternity: Therefore he has no Successor or Vicar, in the Sacerdoce or Priesthood; therefore there are no Priests now upon Earth, and consequently no Sacrifice; which is confirm'd by the Apostle, *Heb.* 7. where he says, that there were several Priests in the Old Testament, who succeeded one another, because every one of them was mortal; but Christ is immortal, and therefore wants no Successors and Vicars.

To this the Catholics answer, that there is a great Difference between being another's Successor, and being his Vicar or Minister; for a Successor is equal in Dignity and Power to his Predecessor, but not a Minister or Vicar; besides, a Successor is not established but after the Decease or Deposition of his Predecessor, when as a Minister or Vicar is established, while the Person whose Minister or Vicar he is, is yet living; as is evident in a Prince, who has no Successor while he lives, or remains possessed of his Dignity; though he has Ministers or Vicegerents, who are subservient to him. Likewise, Christ has no Successor in the Sacerdoce, with an Equality of Power, because he lives eternally, as very well observed by the Apostle; but he has Ministers or Vicars, who are subservient to him in the sacerdotal Office.

The fifth Objection is, that the Sacrifice of the Cross, was of an infinite Efficacy: Therefore we want no other Sacrifice, and to multiply so many Sacrifices of the Mass, is nothing else but denying the Virtue and Sufficiency of the Sacrifice of the Cross.

The Catholics answer, that the Sacrifice of the Cross was of an infinite Efficacy for our Sanctification; and that we want no other Sacrifice of the Cross, nor a Repetition of the same Sacrifice; or, what is the same Thing, we do not want that another Christ should die for us; or that the same Christ should oftener die: For in dying once, he has sufficiently satisfy'd God the Father for us, *Heb.* xvi. 28. and xx. 14. but that notwithstanding there are two Things necessary; first that we should remember so signal a Benefit; the other, that the Spirit of that Benefit should be applied to us: Which two Things are done by the Sacrifice of the Mass, and the other Means ordered by God.

The other Point in Controversy, is the Communion under both Kinds, practised by the Protestants, who reproach the Catholics, first, that contrary to the open Institution, and the Precept of Christ, they give the *Eucharist* to the Laicks under one Kind only; secondly, that thereby they defraud them of the other Part of their Inheritance, left them by Christ. For Christ in his last Supper, made a Testament, whereby he bequeathed to all the Faithful, Laicks as well as Priests, his Flesh and Blood, by Way of Inheritance, *Luke* xxii. 20. *This Cup is the New Testament in my Blood.* But that they deprive the Laicks of the other Part of that Inheritance, in not giving them the Blood, but only the Flesh.

The Catholics answer, in their own Defence, that all

all that is objected against them by the Protestants, on this Subject, is false. First, say they, it is false that there is a Precept of *Christ*, whereby the Laicks are obliged to take the Communion under both Kinds. Secondly, it is likewise false that the *Eucharist* under both Kinds, is the Inheritance bequeathed to us by *Christ*, in the New Testament. Thirdly, it is equally false, that they give only the Flesh to the Laicks, and not the Blood. Let's see at present, how they prove these three Assertions.

They prove the first Assertion (*viz.* that there is no Precept of *Christ*, whereby the Laicks are obliged to take the Communion under both Kinds) in two Manners. First, because, say they, their Adversaries cannot find such Precept in the Scripture, which Adversaries are of three Kinds, *viz.* the *Hussites*, *Lutherans*, and *Calvinists*, who all search that Precept, but none of them can find it. The *Hussites* search it in these Words, *John vi. 53. Except ye eat the Flesh of the Son of God, and drink his Blood, ye have no Life in you.* But the *Lutherans* deny it, and declare, that there is not the least Word throughout all that Chapter, which can be understood of the Sacrament of the *Eucharist*; therefore, themselves search it in those of *Luke xxii. 19. Do this.* But *Calvin* contradicts it, and maintains, that those Words were addressed to the Priests alone, and not to the Laicks. Therefore himself searches that Precept in these of *St. Matthew xxvi. 27. Drink ye all of it*; but, say they again, *St. Mark* declares that those Words were directed to the Apostles alone, when he adds, *And they all drank of it.* Whence they conclude, that their Adversaries do not agree among themselves on that Precept, but on the contrary, differ in such a Manner, that where some of them imagine to have found that Precept, the others deny it.

Secondly, they say, that they on the contrary, can prove by the Authority of the Fathers, and the unanimous Consent of the Church, that one Kind suffices. Those Fathers they quote to support their Sentiment, are, *St. Jerom*, *St. Chrysostom*, *St. Augustin*, *Theophylactus*, and several others; who assure, first, that *Christ* gave the *Eucharist* to the two Disciples at *Emmaus*, under one Kind. Secondly, who say, that in the Time of the Apostles, it was common to give the Communion under one Kind only, and prove it from this of the *Acts ii. And they persevering in the Doctrine of the Apostles, and the Communion of breaking Bread, and in Prayers*; or as *Syrus* translates it, *they communicated in Prayers, and in the Fraction of the Eucharist.* And from this other of the *Acts xx. 7. And upon the first Day of the Week, when the Disciples came together to break Bread.* Thirdly, who say, that after the Time of the Apostles, one Kind was used.

They prove their second Assertion, (*viz.* that *Christ* has not left us in the New Testament the *Eucharist* under both Kinds, by way of Inheritance, or Legacy, (as pretended by their Adversaries) in this Manner: Because, say they, as God, in the Old Testament, promised the *Hebrews* the Land of *Canaan* by way of Inheritance, (*Psal. cxi. 11. and Levit. xx. 14.*) Likewise, in the New, he promised us Eternal Life by way of Inheritance, (*Tit. iii. 7. and Heb. ix. 15.*) not the *Eucharist*. Neither have we ever read in the Scripture that we are the Heirs of the *Eucharist*, or of the Flesh and Blood of *Christ*, but of the Eternal Life, or the Kingdom of Heaven, (*Rom. viii. 17. Tit. iii. 7. and James ii. 5.*) They confirm this Proof thus: Because the Manna was the Figure of the *Eucharist*; but the Manna was not the Inheritance of the *Hebrews*, but a Food, or Viatick, for their Refection in their Way to the Land of *Canaan*, which was their Inheritance. Therefore, likewise, the *Eucharist* is not our Inheritance, but a Viatick, for our Refection, during our Journey from Time to Eternal Life, which is the Inheritance promised to us.

To this the Protestants object the Passage of *St. Luke, xxii. 20. and of the first Epistle to the Corinthians, xi. 25. This Cup is the New Testament of my Blood.* To which the Catholics answer, that the

Sense of these Words is not this: My Blood which is in this Cup is the New Testament, *i. e.* the Legacy left by me; but quite otherwise, as explain'd by *St. Matthew* and *St. Mark*, when they say, *This is my Blood of the New Testament*; *i. e.* This is my Blood which gives a Sanction to the New Testament: Where *Christ* opposes the New Testament to the Old; and his Blood to the Blood of the Victims. For as the Old Testament has been confirmed by the Blood of the Animals; the New has, likewise, been confirmed by the Blood of *Christ*. And as *Moses* said of the Old Testament, *Exod. xxiv. 8. Behold the Blood of the Covenant which the Lord has made with you.* And the Apostle, *Heb. ix. 19. For when Moses had spoken every Precept to all the People according to the Law, he took the Blood of Calves and of Goats, saying, this is the Blood of the Testament which God has enjoyn'd unto you.* Likewise *Christ* says of the New, *This is my Blood of the New Testament.* It should be said, according to our Adversaries, continue they, this Blood of *Christ* is the New Testament; *i. e.* the Inheritance left to the New Testament. Likewise this Blood of the Calves and Goats, is the Old Testament, *i. e.* the Inheritance left to the Old Testament, which is very absurd.

They prove their third Assertion, *viz.* that the Laicks receive under one Kind, not the sole Flesh of *Christ*, but the Flesh and Blood together; or that *Christ* is no less contain'd entire under one Kind than under both; by that *Christ* is immortal, according to this, *Rom. vi. 9. Christ being raised from the Dead, dies no more.* Therefore the Flesh and Blood, Soul, and Divinity of *Christ*, remain always join'd or united together; and consequently as the Flesh of *Christ* is under the Species of the Bread; his Blood, Soul, and Divinity, must be there likewise; whence it follows, that there is no less Fruit receiv'd from one Species than from both; since the whole Fruit is receiv'd from the Presence of *Christ*, who is no less present under one Element, than under both.

It may be asked why, then, the Priests are not contented with one Species, as they command the Laicks to be contented with one Species? To which the Catholics answer, that the *Eucharist* is not only a Sacrament, but likewise a Sacrifice; that the End of a Sacrament can be answered by one Species, but that the End of a Sacrifice requires both Species; that, therefore, the Laicks who receive the *Eucharist* as a Sacrament, can be contented with one Species, but the Priests who offer it as a Sacrifice, must take both Kinds.

The *Hussites* object to this, this Passage, *Unless you eat the Flesh of the Son of Man, and drink his Blood, you will not have Life within you.* To which the Catholics answer, that those Words contain in Fact, a Precept of taking the *Eucharist*; but not of taking it under both Kinds, since no Mention is made of the Species of the Bread and Wine, but of the Flesh and Blood, which both can be taken under one Kind.

The *Lutherans* object, *Do this in Remembrance of me.* The Catholics answer, that these Words were spoken after eating the Bread, not after taking the Cup. Whence therefore cannot be inferr'd the Precept of taking the Cup.

The *Calvinists* object this Passage, *Drink ye all of it.* The Catholics answer, that this was said to the Apostles only, who were then present. For when *Christ* had divided the *Eucharistical* Bread, and had given to the Apostles every one his Part, it being impossible to divide the Cup in the same Manner, he presented it whole to one of them, with this Caution, that he should not drink it all, but only take some of it, and forward it afterwards to the rest of the Apostles, to every one in his Turn. That therefore these Words, *Drink ye all of it*, have the same Signification as these of *St. Luke, Chap. xxii. 17. Take this and divide it among yourselves*; *i. e.* one must not empty the Cup, but every one must drink some of it: Which was done, according to *St. Mark, and they all drank of it.*

The Protestants borrow also several Objections from the antient Fathers; and first, from St. Cyprian, who, in a Sermon on the Lord's Supper, speaks thus: *The Law forbids the Use of Blood, the Gospel commands to drink it.* The Catholicks answer, that St. Cyprian, to prove the Precept of drinking Blood, quotes this Passage: *Unless ye eat the Flesh of the Son of Man, and drink his Blood, you'll not have Life within you.* But that Precept, as we have prov'd already, say they, does not require both Kinds, but eating the Flesh, and drinking the Blood, which can be done under one Kind; which St. Cyprian insinuates, when he adds, *drinking and eating are to the same Purpose*; as if he had said, it is the same Thing to eat Christ, as to drink Christ. Therefore whoever eats him under one Kind, not only eats his Flesh, but likewise drinks his Blood; and consequently accomplishes the evangelical Precept, mentioned by St. Cyprian.

They object, secondly, from St. Chrysostom, Hom. 18. on the last Epistle to the Corinthians, where that Father says, *And there is no Difference between the Priest and the Slave, in the Participation of the sacred Mysteries; for we are all judged equally worthy to receive them; for it is not now, as it was under the Law, when the Priest used to eat one Part, and the People the other Part; and the People were not permitted to partake of those Things, whereof the Priest was Partaker. But at present it is not so, for one Body is proposed to all, and one Cup.*

The Catholicks answer, that there is no Mention made in this Place of the Precept of both Kinds; and that St. Chrysostom does not dispute here of such a Precept, but only assigns the Difference between the Sacrifices of the Old Testament and of the New. For in the Old Testament, the Priest eat one Part of the Sacrifice, and the People the other; but in the New Testament, both the Priest and the People, eat equally the whole Victim. That all Christ is to be eaten and drank by both; and that St. Chrysostom understands nothing else. That as to what he adds, that the same Body, and the same Cup, is proposed to both; it must not be understood of the Sacramental Species, but of the Flesh and Blood of Christ. For the Sense is not, that the same Species of Bread, and the same Species of Wine, is proposed to all indifferently, Laicks and Priests, since every one receives, each his Part, really distinct, of the consecrated Bread and Wine; but that the same Flesh, and the same Blood of Christ, is proposed to all; so that the Priest receives nothing of the Flesh, and of the Blood, but what the Laicks receive likewise; and in that he puts the Difference between the Priest and People of both Laws.

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E U T Y C H I A N S.

EUTYCHIANS, were Hereticks, who appeared towards the Middle of the fifth Century; thus denominated from *Eutyches*, the Archimandrite, or Abbot of a Monastery at *Constantinople*.

Eutyches has courageously opposed the Errors of *Nestorius*, and prov'd very servicable to the Fathers of the Council of *Ephesus*, near the Emperor, but in flying from one Precipice, he fell into another, and was the Inventor of an Heresy, as detestable as that which had been but lately condemn'd. For he had the sacrilegious Presumption, to teach that our blessed Lord *Jesus Christ*, was not consubstantial to us according to the Flesh, having a celestial Body, which had passed through the Virgin *Mary*, as through a Channel; that there had been two Natures in him before the hypostatical Union; but that after that Union, there had remained but one composed of both.

By this new Impiety, it could have been reasonably said, that *Jesus Christ* was crucified between *Nestorius* and *Eutyches*, as he had been between two Thieves.

Since the one robb'd him of the Unity of Person, and the other of the Distinction of Natures; which was destroying the Mystery of his Incarnation, and his theandrical State, *i. e.* divinely human, and humanly divine. *Eutyches* himself, fell, then, without perceiving it, into *Nestorianism*. For if in *Jesus Christ* there had been two distinct Natures before the Union, there had been, then, two Persons, which was the Opinion of *Nestorius*. And how could one single Nature remain? For it was necessary, either that one of the two should be destroy'd, or changed into the other; or that both should be absorbed, and changed into a third; or that remaining entire, that which was left should be made of them; all which Manners were equally ridiculous and impious.

But *Theodoret*, in his second Dialogue, informs us, that *Eutyches* believed that the human Nature, had been absorbed by the divine Nature; as if a Drop of Honey should chance to fall into the Sea, it would not perish, but only would be absorb'd in that Element.

all that is objected against them by the Protestants, on this Subject, is false. First, say they, it is false that there is a Precept of *Christ*, whereby the Laicks are obliged to take the Communion under both Kinds. Secondly, it is likewise false that the *Eucharist* under both Kinds, is the Inheritance bequeathed to us by *Christ*, in the New Testament. Thirdly, it is equally false, that they give only the Flesh to the Laicks, and not the Blood. Let's see at present, how they prove these three Assertions.

They prove the first Assertion (*viz.* that there is no Precept of *Christ*, whereby the Laicks are obliged to take the Communion under both Kinds) in two Manners. First, because, say they, their Adversaries cannot find such Precept in the Scripture, which Adversaries are of three Kinds, *viz.* the *Hussites*, *Lutherans*, and *Calvinists*, who all search that Precept, but none of them can find it. The *Hussites* search it in these Words, *John vi. 53. Except ye eat the Flesh of the Son of God, and drink his Blood, ye have no Life in you.* But the *Lutherans* deny it, and declare, that there is not the least Word throughout all that Chapter, which can be understood of the Sacrament of the *Eucharist*; therefore, themselves search it in those of *Luke xxii. 19. Do this.* But *Calvin* contradicts it, and maintains, that those Words were addressed to the Priests alone, and not to the Laicks. Therefore himself searches that Precept in these of *St. Matthew xxvi. 27. Drink ye all of it*; but, say they again, *St. Mark* declares that those Words were directed to the Apostles alone, when he adds, *And they all drank of it.* Whence they conclude, that their Adversaries do not agree among themselves on that Precept, but on the contrary, differ in such a Manner, that where some of them imagine to have found that Precept, the others deny it.

Secondly, they say, that they on the contrary, can prove by the Authority of the Fathers, and the unanimous Consent of the Church, that one Kind suffices. Those Fathers they quote to support their Sentiment, are, *St. Jerom*, *St. Chrysostom*, *St. Augustin*, *Theophylactus*, and several others; who assure, first, that *Christ* gave the *Eucharist* to the two Disciples at *Emmaus*, under one Kind. Secondly, who say, that in the Time of the Apostles, it was common to give the Communion under one Kind only, and prove it from this of the *Acts ii. And they persevering in the Doctrine of the Apostles, and the Communion of breaking Bread, and in Prayers*; or as *Syrus* translates it, *they communicated in Prayers, and in the Fraction of the Eucharist.* And from this other of the *Acts xx. 7. And upon the first Day of the Week, when the Disciples came together to break Bread.* Thirdly, who say, that after the Time of the Apostles, one Kind was used.

They prove their second Assertion, (*viz.* that *Christ* has not left us in the New Testament the *Eucharist* under both Kinds, by way of Inheritance, or Legacy, (as pretended by their Adversaries) in this Manner: Because, say they, as God, in the Old Testament, promised the *Hebrews* the Land of *Canaan* by way of Inheritance, (*Psal. cxi. 11. and Levit. xx. 14.*) Likewise, in the New, he promised us Eternal Life by way of Inheritance, (*Tit. iii. 7. and Heb. ix. 15.*) not the *Eucharist*. Neither have we ever read in the Scripture that we are the Heirs of the *Eucharist*, or of the Flesh and Blood of *Christ*, but of the Eternal Life, or the Kingdom of Heaven, (*Rom. viii. 17. Tit. iii. 7. and James ii. 5.*) They confirm this Proof thus: Because the Manna was the Figure of the *Eucharist*; but the Manna was not the Inheritance of the *Hebrews*, but a Food, or Viatick, for their Refreshment in their Way to the Land of *Canaan*, which was their Inheritance. Therefore, likewise, the *Eucharist* is not our Inheritance, but a Viatick, for our Refreshment, during our Journey from Time to Eternal Life, which is the Inheritance promised to us.

To this the Protestants object the Passage of *St. Luke, xxii. 20. and of the first Epistle to the Corinthians, xi. 25. This Cup is the New Testament of my Blood.* To which the Catholics answer, that the

Sense of these Words is not this: My Blood which is in this Cup is the New Testament, *i. e.* the Legacy left by me; but quite otherwise, as explain'd by *St. Matthew* and *St. Mark*, when they say, *This is my Blood of the New Testament*; *i. e.* This is my Blood which gives a Sanction to the New Testament: Where *Christ* opposes the New Testament to the Old; and his Blood to the Blood of the Victims. For as the Old Testament has been confirmed by the Blood of Animals; the New has, likewise, been confirmed by the Blood of *Christ*. And as *Moses* said of the Old Testament, *Exod. xxiv. 8. Behold the Blood of the Covenant which the Lord has made with you.* And the Apostle, *Heb. ix. 19. For when Moses had spoken every Precept to all the People according to the Law, he took the Blood of Calves and of Goats, saying, this is the Blood of the Testament which God has enjoy'd unto you.* Likewise *Christ* says of the New, *This is my Blood of the New Testament.* It should be said, according to our Adversaries, continue they, this Blood of *Christ* is the New Testament; *i. e.* the Inheritance left to the New Testament. Likewise this Blood of the Calves and Goats, is the Old Testament, *i. e.* the Inheritance left to the Old Testament, which is very absurd.

They prove their third Assertion, *viz.* that the Laicks receive under one Kind, not the sole Flesh of *Christ*, but the Flesh and Blood together; or that *Christ* is no less contain'd entire under one Kind than under both; by that *Christ* is immortal, according to this, *Rom. vi. 9. Christ being raised from the Dead, dies no more.* Therefore the Flesh and Blood, Soul, and Divinity of *Christ*, remain always join'd or united together; and consequently as the Flesh of *Christ* is under the Species of the Bread; his Blood, Soul, and Divinity, must be there likewise; whence it follows, that there is no less Fruit receiv'd from one Species than from both; since the whole Fruit is receiv'd from the Presence of *Christ*, who is no less present under one Element, than under both.

It may be asked why, then, the Priests are not contented with one Species, as they command the Laicks to be contented with one Species? To which the Catholics answer, that the *Eucharist* is not only a Sacrament, but likewise a Sacrifice; that the End of a Sacrament can be answered by one Species, but that the End of a Sacrifice requires both Species; that, therefore, the Laicks who receive the *Eucharist* as a Sacrament, can be contented with one Species, but the Priests who offer it as a Sacrifice, must take both Kinds.

The *Hussites* object to this, this Passage, *Unless you eat the Flesh of the Son of Man, and drink his Blood, you will not have Life within you.* To which the Catholics answer, that those Words contain in Fact, a Precept of taking the *Eucharist*; but not of taking it under both Kinds, since no Mention is made of the Species of the Bread and Wine, but of the Flesh and Blood, which both can be taken under one Kind.

The *Lutherans* object, *Do this in Remembrance of me.* The Catholics answer, that these Words were spoken after eating the Bread, not after taking the Cup. Whence therefore cannot be inferr'd the Precept of taking the Cup.

The *Calvinists* object this Passage, *Drink ye all of it.* The Catholics answer, that this was said to the Apostles only, who were then present. For when *Christ* had divided the *Eucharistical* Bread, and had given to the Apostles every one his Part, it being impossible to divide the Cup in the same Manner, he presented it whole to one of them, with this Caution, that he should not drink it all, but only take some of it, and forward it afterwards to the rest of the Apostles, to every one in his Turn. That therefore these Words, *Drink ye all of it*, have the same Signification as these of *St. Luke, Chap. xxii. 17. Take this and divide it among yourselves*; *i. e.* one must not empty the Cup, but every one must drink some of it: Which was done, according to *St. Mark, and they all drank of it.*

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Eutyches's Partisans could not agree on the Time when that Confusion of Nature was made: Some said that it was at the very Instant of the Conception; and others understood it after the Resurrection and Ascension. This Heresy deprived likewise the Virgin *Mary* of her Quality of Mother of God: For if the Body of *Jesus Christ* had only passed through her as through a Channel, and if she had furnished nothing of her own Substance for the Formation of that Body, there could be no true Maternity; which does not consist only in bringing into the World, but likewise in begetting the Child. The *Eutychianism* approached, likewise, very near the Heresy of *Valentin*, of *Marcion*, of *Apollinaris*, and of *Manes*; who pretended that the Body of the Son of God had not been a true Body, but only a fantastical one, and which had ran from Heaven, through the Womb of *Mary*, as Water runs through a Channel. But the greatest Impiety, which followed from that Unity of Nature, was, that by a necessary Consequence the Divinity should have suffer'd the Torments of the Passion, and even Death.

Eusebius Bishop of *Dorylaea*, in the Province of *Phrygia*, and *Eutyches's* Friend, endeavour'd to render him sensible of the Impiety of his Opinions; but *Eutyches* maintain'd them always with Obstinacy; so that *Eusebius* found himself obliged, at last, to inform *Flavian* of it, who was then Bishop of *Constantinople*, and consequently *Eutyches's* Diocesan, that he might employ his Authority to smother that Fire, before it could break into Flames, and prove as fatal to the Church as had been that of the *Nestorianism*; which was not yet very well extinguished.

Flavian had assembled a Synod, at *Constantinople*, to judge of the Differences happened between *Florentius* Metropolitan of *Sardes* in *Lydia*, and two of his Suffragans. *Eusebius* enter'd that Synod, and presented a Request against *Eutyches*, accusing him of teaching a Doctrine contrary to the orthodox Faith; and desiring the Bishops to oblige him to appear, to answer to the Things which should be exhibited against him. The Bishops desired *Eusebius* to take himself the Trouble to go to the Monastery of *Eutyches*, and endeavour to reclaim him, by fair Means, from his Errors: But having desired to be excused from that Office, the Synod deputed a Priest and a Deacon, to carry to him the Request which had been presented against him; and to entreat him to come to the Synod, and answer, there, the Accusation which *Eusebius* had form'd against him. *Eutyches*, instead of obeying, answer'd, 'He would not come out of his Monastery, where he was resolved to remain, as in a Tomb; that *Eusebius* was his Enemy, and a Calumniator; that he was ready to subscribe to the Exposition of Faith, made by the holy Bishops in the Councils of *Nice* and *Ephesus*; that if they had been mistaken on some Points, he would neither reprimand them, nor approve them by his Subscription; because he searched the Truth in the sacred Scriptures alone, which were more secure than the Exposition of the Fathers.' After this artificial and equivocal Answer, he says plainly, that 'he adored after the Incarnation of our Lord *Jesus Christ*, one single Nature in him; that he confessed him a perfect God, and a perfect Man, but having not a Flesh consubstantial to ours.' This Answer having been brought to the Synod, shew'd plainly enough his Heresy, and inspired all those who heard it with Indignation and Horror. But however, to observe the Formalities used on such Occasions, he had a second Citation, which was carried to him by the Priests *Mammias* and *Theophilus*. While those Deputies were executing their Commission, *Eusebius* inform'd the Assembly, that *Eutyches* had sent a Book, he had composed, into all the Monasteries, to corrupt the holy Monks, and make them subscribe to his Doctrine; and required that the Priest of the Church of *St. John the Baptist*, should be examined on that Subject, to know of him, if what he advanced was not true. *Flavian* examined that Witness, who an-

swered, that what *Eusebius* had alledged was true. The Synods sent two Priests and two Deacons to the Monasteries of *Constantinople*, and to those of *Chalcedon*, to get Information, if *Eutyches* had sent his Book to them; who all answer'd, that he had done it.

At the same Time the Deputies, who had been sent to *Eutyches*, came to his Monastery, and found a great Number of Monks at the Gates. The Deputies entered with them; and having told them, that they were there to speak to their Abbot, from the Synod; they were answer'd, that they could not see him, because he was sick; but if they had any Thing to say to him, they might intrust them with it, and they would let him know it; a Monk, call'd *Eleusius*, came from him with the same Message. But as they still insisted, that they were order'd to speak to him in Person, they were at last admitted into his Cell. After he had heard read the Citation of the Synod, he answer'd, as he had done the first Time, 'That he was resolv'd not to go out of his Monastery; and the most holy Archbishop, and the holy Synod, could do what they pleased, without giving the Trouble to any Body to come to him; and that he considered himself as cited for the third Time.' *Mammias* having made that Report, *Eusebius* pressed the Synod to force *Eutyches* to appear; but to observe all the juridical Formalities, he was cited for the third Time, by *Memnon* Keeper of the sacred Vessels, *Epiphanius* Priest, and *Germanus* Deacon, to appear the 17th of the Month of *November*. The Day before the Abbot *Abrahamus* came to make his Excuses on the Malady which kept him in his Bed. The Synod received them; but advised him at the same Time, to appear to justify himself if he was innocent, and to renounce his erroneous Opinions if he was guilty. 'You know, said the Fathers, the Zeal of his Accuser; which is such, that the Fire of others seems cold when compared to his.' These last Deputies having informed the Synod, that he asked for a Week's Delay, which was granted; that he might not complain of any Precipitation in the Sentence which should be pronounced against him.

That wicked Heresiarch, who had so often protested, that he was determined not to go out of the Monastery, having obtained from the Synod the Time he had asked, came out at last, and went to implore the Protection of *Chrysophius*, to whom he had stood Godfather, to be saved from the Precipice he saw himself engag'd in. That Favourite, who govern'd entirely the Emperor *Theodosius* his Master, obtained from him, that *Eutyches* should be conducted to the Synod by the Patrice *Florentius*, and the *Silentiarius*, under Pretence that he was afraid of the too great Power of *Flavian* his Enemy. He appear'd then, accompany'd with a great Number of Soldiers, of Monks, and of Messengers or Bailiffs. What had been transacted in the preceding Sessions was read; and *Eusebius*, his Accuser, having complain'd of the Menaces *Eutyches* had caused to be made to him, of having him sent into Exile, asked him, how the Profession of Faith of *St. Cyril* was recited, by which that Father confessed two Natures in Christ, if he was of the same Sentiment? He answer'd, that he acknowledg'd two Natures before the Union, and but one after it. The Patrice *Florentius* pressed him to retract that Blasphemy; but as he persisted obstinately in it, he was degraded by the Synod from the Priesthood, deprived of the Superiority of his Monastery, and of the ecclesiastical Communion, as well as all those who had any Communication with him.

Flavian wrote presently after to Pope *Leo*, to inform him of what had been done, in the Condemnation of *Eutyches*; and to desire his Beatitude, that he would be pleased to let all the Bishops, who were under his Jurisdiction, know it, lest thro' Ignorance some of them should keep Correspondence with that Heretick, believing him orthodox. *Eutyches*, on his Side, wrote to him likewise a very artful Letter, and full of Falshoods; whereby he assured him, that

he had appealed from the Judgment of the Synod to his Holiness, but that his Appeal had not been minded: Protesting, at the same Time, that he was ready to correct in his Opinions all that he would disapprove. But to gain him on his Side, he found Means to have his Dispatches carried to *Rome* before those of *Flavian*. Not contented with that, he engaged *Theodosius* to complain, that the synodal Acts had been falsified; and dispersed thro' *Constantinople* Libels, where he complain'd of the Injustice done to him. *Chrysostomus*, his Protector, procured him, the Year following, Letters from *Theodosius* to Pope *Leo*, to recommend his Innocence to him. As *Leo* had not yet received *Flavian's* Letter, he answer'd the Emperor (*Epist.* 17.) that 'he prized much his Zeal for the Christian Religion, and to prevent Schisms, Heresies and Scandals, from making any Progress in it. That he had receiv'd some Complaints from the Priest *Eutyches*, who protested to keep the Faith of *Nice*; and a Libel of Accusation against the Bishop *Eusebius*, where the particular Fact was not clearly stated; so that he had wrote to *Flavian* to let him know, that he was in the wrong not to inform him of what had been done in an Affair of that Importance; but he hoped, after that Advice, he would send him an exact Relation; thereby discovering what was yet hidden, he would judge what could be agreeable to the Evangelical and Apostolical Doctrine.'

Flavian answer'd his Letter, (*Tom.* 1. *Epist. Pontif.* pag. 165.) and inform'd him of the Impiety of *Eutyches*, which had obliged the Bishops to condemn him; and entreating him to make of the common Cause his own Cause; by declaring that the Condemnation had been regularly made; and would be pleased to confirm by his Writings the Faith of the most pious Emperor. 'For the Cause, says he, wants but your Consent and Approbation, to conduct all Things to Tranquility and Peace: Thus the Heresy which has been invented lately, and the Troubles it has caused, will be easily appeased, God co-operating with your sacred Letters.'

Chrysostomus, who supported with Impatience the Condemnation of *Eutyches*, employ'd all his Artifices near the Emperor, to make it fall on the Head of *Flavian*. He persuaded him, on the frequent Complaints made by the Heresiarch, to assemble Bishops at *Constantinople*, to revise his Cause: In Consequence thereof, Thirty were assembled, in Synod, in the Month of *April*, in the Baptistry of the great Church. All that passed in that Synod, is fairly and impartially related in my Treatise of the Councils; therefore a Repetition of the same, would be too tedious in this Place: All I can say is, that notwithstanding all the Intrigues of *Eutyches*, and the great Credit of his Protector and Partisans, his Condemnation was confirm'd in this Synod. Which Disappointments being not capable to disconcert *Eutyches*, he asked, as a new Favour, that *Dioscorus* of *Alexandria*, who was infected with his Error, should be appointed to revise his Affair, which was also granted by *Theodosius*, who for that Purpose assembled a Council at *Ephesus*, where *Dioscorus* presided, where *Flavian* was murder'd by *Dioscorus* himself, *Eusebius* of *Dorileia* sent into Exile, and all that had been done against *Eutyches*, in the two Synods of *Constantinople*, broken and annul'd; as it may be seen at large in my Treatise of the Councils.

Theodosius had wrote to Pope *Leo*, to desire him to come to the Council; but the Term was so short, that if the Pope had even the least Inclination to it, it had been absolutely impossible: For he received the Emperor's Letter but the Eleventh of *May*, and he should have been at *Ephesus* the First of *August*. He notwithstanding wrote to the Emperor, to dissuade him from that Assembly, where he could not be in Person; for, besides that the Thing was without Example, the present Condition of the City of *Rome* could not permit him to be absent from it. But his Letters proving insignificant, he resolved to send his Legates to *Ephesus*; who were *Julian* Bishop of *Pon-*

zol, *Renatus* Priest, *Hilary* Deacon; and *Dulcitius* his Notary, to represent him in the Council.

He gave them an Epistle or Constitution; wherein he explains at length, and in a marvellous Manner; the Catholick Doctrine of the Incarnation; and tho' it be address'd to *Flavian*, it was nevertheless for all the Bishops of the Church; and became afterwards of such Authority, that every one receiv'd it as a Rule of Faith; and the Custom was introduced in the West, to read it every Year in the Church, in the Month of *December*, before the Feast of the Nativity of our Lord. Those particular Marks of the great Veneration which the whole Christian World had for that Epistle of *Leo*, have engaged me to translate it here at length, for the Instruction and Satisfaction of the Reader.

LEO, Bishop, to his dearly-beloved *Flavian*, Bishop of *Constantinople*:

Having read the Letters of your Dilection, and examined the episcopal Acts you have sent me, we have at last discovered the Scandal happened among you, and what has been done against the Faith; and the Things which first appeared embarrassed to us; are, at present, very conspicuous. At present *Eutyches*, whom the Name of Priest, seemed to render respectable, appears to us imprudent and ignorant; and it seems that it is of him the Prophet speaks, when he says, *He has left off to be wise and to do Good; he devises Mischief upon his Bed*. For what can be more iniquitous, than to have impious Sentiments; and to not believe those who are wiser and more learned? But those fall into that Folly who being stopt by some Obscurities in the Knowledge of Truth; instead of having Recourse to the Writings of the Prophets, and of the Apostles, have Recourse but to themselves; and thus not to be Disciples of the Truth; become Masters of Error. But what Intelligence of the Old and New Testament, can it be said that *Eutyches* has acquired, he who does not so much as know the first Articles of the Symbol? What is confessed by all those who are regenerated by Baptism, is not yet understood by that old Man; then not knowing what he ought to believe of the Incarnation of the Word of God, and unwilling to work to learn it, in the large Field of the sacred Scriptures, we could have wished that he had understood that common Confession of Faith, whereby all the Faithful protest to believe in God the Father Almighty, and in *Jesus Christ* his only Son our Lord, who is born of the Virgin *Mary* by the Operation of the Holy Ghost, three Sentences where all the Machinations of Hereticks are almost destroyed.

For when one believes that God is Almighty and Eternal, one shews that his Son is eternal with him, and that he differs in nothing from the Father, because he is born God of God, Almighty from the Almighty, and co-eternal; neither Posterior in Time, nor Inferior in Power, nor dissemblable in Glory, nor divided in Essence. But the same eternal and only Son of him who begets him eternally, is born of the Virgin *Mary* by the Operation of the Holy Ghost; and that temporal Nativity, which has deprived of nothing, nor given any Thing new, to the divine and eternal Nativity, has wholly employ'd and given herself for the Reparation of Man (who had been seduced) to ruin Death, and destroy, by his Virtue, the Reign of the Devil, who had the Empire of Death. For we could not have conquered the Author of Sin and Death, if he whom Sin could not affect; nor Death keep under its Power, had not took our Nature, and made it his own; therefore he has been conceived in the Womb of the Virgin his Mother, by the Operation of the Holy Ghost, who has brought him into the World, without any Lesion of her Virginity, as she had conceived him, without its having been in the least offended.

But if *Eutyches* could not draw that sincere Sentiment from the pure Fountain of the Faith, because he had eclipsed in him, by a contrary Blindness, the Splendor

Splendor of the Truth; why would he not submit himself to the Authority of the evangelical Doctrine, in St. *Matthew*, who says, the Book of the Genealogy of *Jesus Christ*, Son of *David*, Son of *Abraham*? Why would he not hear the apostolical Predication of St. *Paul*, who, writing to the *Romans*, begins thus: *Paul a Servant of Jesus Christ, called to be an Apostle, separated unto the Gospel of God (which he had promised before by his Prophets in the Holy Scriptures) concerning his Son Jesus Christ our Lord, which was made of the Seed of David according to the Flesh?* Why would he not consult, with Attention and Care, the Writings of the Prophets, and he had found the Promise God made to *Abraham*, saying, *Genes. xxii. And in thy Seed shall all the Nations of the Earth be blessed.* And not to be in doubt of him, who was to be that Seed, he had followed the Apostle, who speaks thus: *The Promises have been made to Abraham and to his Seed.* God does not say Seeds, as if there were several, but to thy Seed, as speaking of one alone, which is Christ. He had inwardly conceived what *Isaiah* says, Chap. vii. *Behold a Virgin shall conceive and bear a Son, and shall call his Name Emanuel;* which signifies, God with us. He had read these Words of the same Prophet, Chap. ix. *Unto us a Child is born, unto us a Son is given, and the Government shall be upon his Shoulder: And his Name shall be called Wonderful, Counsellor, the mighty God, the Everlasting Father, the Prince of Peace.*

He would not abandon himself to say, without Reason, that the Word has been in such a Manner made Flesh, that Christ being come from the Womb of the Virgin, had the Form of Man, but had not the Truth of the maternal Body; because the Angel sent to *Mary*, says to her; *The Holy Ghost shall come upon thee, and the Power of the Highest shall overshadow thee: therefore also that holy Thing which shall be born of thee, shall be called the Son of God.* As if because the Conception of the Virgin has been a divine Operation, the Flesh of the Infant conceived was not the Nature of the Mother conceiving: But that Generation singularly marvellous, and marvellously singular, must not be understood so that by the Novelty of the Creation, the Truth of the Nature be destroyed. For the Holy Ghost has given the Fecundity to the Virgin, and the Truth of the Body of *Jesus Christ* has been taken from the Body of his Mother. And the supreme Wisdom building to himself a House, *The Word was made Flesh and dwelt among us;* that is to say, in the Flesh he has taken from Man, and which was animated with a rational Soul. Therefore each Nature preserving its Property, and uniting in one Person, a low Condition has been taken for Majesty, Infirmary for Power, Mortality for Eternity: And to pay the Debt of Men, the inviolable Nature has united herself to a passible Nature, that our Remedy being proportioned to our Malady, the only Mediator between God and Men, *Jesus Christ* a Man, could die as Man, and not die as God.

Therefore the true God is born with the perfect Nature of a true Man, possessing all that's his own, and all that's ours. I call ours the natural Advantages in which God created us at the Beginning, and which Christ is come to repair; for what the deceiving Devil has sidden into human Nature, and which the deceived Man has received, has not had the least Place in Christ; and we must not imagine, that because he is enter'd into the Society of our Infirmities and Miseries, he has also participated to our Sins. He has took the Form of a Slave, without taking the Sin, raising the Humanity to a higher Degree, without debasing the Divinity; because that Humiliation, whereby the Invisible has render'd himself Visible; and the Creator and Master of all Things would become one of the mortal Kind; has been an Humiliation of Mercy, and not a Defect of Power; for each Nature has, without Defect, retain'd its Property: And as the Form of God has not took off the Form of Man, likewise the Form of God has not took off the Form of Slave. The Devil glorified himself, that Man, deceived by his Fraud, was deprived of the Ad-

vantages he had received from God, and that having lost the Gift of Immortality, he was under a Sentence of Death. He gloried that God, by his Justice ordering it thus, had changed his Will for Man, whom he had created in so high a State of Honour; and it was a Sort of Consolation for him, in his Misfortune, to have a Companion of his Fault. Therefore it was necessary, that by the secret Conduct of an adorable Council, God, who is immutable, and whose good Will cannot be deceived in his Designs, should accomplish the first Resolution of his Mercy, by a hidden Mystery; that Man, whom the Devil had prompted to Sin by his Artifices, should not perish; God wanting to save him.

Therefore, the Son of God enters this sublunary World, descending from the celestial Throne, without departing from the Glory of his Father, and being begotten by a new Birth, and of a new Order. There is a new Order, because he being invisible in his Nature, he has rendered himself visible to ours. The incomprehensible would be comprised; he who was before all Times, would begin to live in Time. The Lord of this vast Universe has took the Form of a Slave; veiling the Immensity of his Majesty, under the Cloud of a Body. The Impassible has made himself capable to suffer, and the Immortal would be subject to Death. There is a new Nativity, because the inviolable Virginity of *Mary*, having not the least Motion of Concupiscence, has furnished the Matter whereof that Body was formed. The Nature, then, has been taken from the Mother of the Lord, and not the Sin; and from that the Nativity of *Jesus Christ* conceived in the Womb of the Virgin, is miraculous, it must not be concluded, that the Nature is different. For he who is true God, is also true Man; and there is no Falshood in that Union, where the Meanness of Man is found united with the Sublimity of the Divinity; and whereas God is not changed by the Humiliation his Mercy has reduced him to, Man is not consumed by the Dignity to which he is rais'd; one Nature acts with a reciprocal Communication of its Properties to the other. The Word co-operating what is of the Word, and the Flesh exercising what is of the Flesh. The one shines with Miracles, and the other is conquered by Miseries. And as the Word has not lost the Quality of the paternal Glory; thus the Flesh has not quitted the Nature of the human Race. For the same (which must be often repeated) is truly the Son of God, and truly the Son of Man: God, because the Word was at the Beginning, and the Word was in God, and God was the Word: Man, because the Word has made himself Flesh, and has inhabited within us: God, because all Things have been made by him, and nothing has been made without him: Man, because he has been form'd of a Woman, and form'd under the Law.

The Nativity of the Flesh, is the Manifestation of the human Nature; and the Delivery of a Virgin, is the Proof of the divine Power. The Infancy of the little one, is shewn by the Humility of the Manger; and the Power of the Almighty, is declared by the Canticks of the Angels. He whom the impious *Herod* attempted to put to Death, is semblable from the Beginning of his Life to the other Children of Men: But he whom the Magi come to adore, with so much Humility, is the Master of all. When he presented himself to the Baptism of *John* his Precursor, lest his Divinity should remain hid under the Veil of his Flesh, the heavenly Father caused this Voice to be heard from Heaven, *This is my beloved Son.* He whom the Deceit of the Devil has dared to tempt as a Man, in the Desert, receives there as God, the Services of the Angels. To be hungry, to be thirsty, to be fatigued, to sleep, it is certainly a human Thing; but to feed five thousand Men with five Loaves, to give to the Woman from *Samaria* Water of Life, which quenches the Thirst forever, to walk on the Sea without sinking, to appease the Rage of Winds, by commanding the Tempest, is certainly a divine Thing. Therefore, (that I may pass by several other Things in Silence) as it is not

not the Property of one and the same Nature, to mourn a Friend deceased, by a Motive of Tenderneſs and Affection, and to raiſe him from the Dead by the ſole Command of his Word; to be crucified, and to change the Day into Night, and to throw all the Elements into Confuſion; to be nailed, and open the Gates of Heaven to a Thief: Likewiſe, it is not a third Nature, who ſays, *I and my Father are one, and my Father is greater than me.*

Though in *Jeſus Chriſt* our Lord, God and Man there is but one Perſon, notwithſtanding, he is both equal and inferior to his Father; from us he holds his Humanity, which renders him leſs than his Father; from the Father he holds the Divinity, which renders him equal to him, becauſe of the Unity of the Perſon, which muſt be underſtood in his double Nature. It is ſaid that the Son of Man is deſcended from Heaven, when the Son of God has took his Fleſh from the Virgin, from whom he is born; and again, that the Son of God has been crucified and buried; tho' he has not ſuffered thoſe Things in his Divinity, whereby he is conſubſtantial and coeternal with his Father, but in the Weakneſs of the human Nature; whence we all confeſs in the Symbol, that the only Son of God has been crucified and buried, according to what the Apoſtle ſays, *1 Cor. ii. If they had known it, they would not have crucified the Lord of Glory.* When that ſame God, our Lord and Saviour, inſtructed his Apoſtles in the Faith, in aſking them, whom *Men ſaid the Son of Man was?* His Diſciples declar'd to him the various Opinions Men had of him. But you, continued he, whom ſay you that I am, who am the Son of Man, and whom you ſee in the Form of a Slave, and covered with human Fleſh? Then the bleſſed *Peter*, being divinely inſpir'd, made that Confeſſion, ſo glorious to both Natures, *Thou art Chriſt the Son of the living God.* After this, it was not without Reaſon, the Lord pronounced that he was bleſſed; and that he extracted from the principal and fundamental Stone, the Solidity of his Name, and of his Virtue; he, who by the Revelation of the Father, had confeſs'd that the ſame Perſon was the Son of God and the Chriſt; becauſe the Confeſſion of the one, could not be uſeful to Salvation, unleſs the Confeſſion of the other was joined to it; and that there was an equal Peril for the Faith, to believe that our Lord *Jeſus Chriſt* was God only, or to believe that he was Man only.

But after the Reſurrection of the Lord, who has been of a true Body, for he is not riſen another, than he who had been crucified and buried; what elſe has he done, during the forty Days he remained upon Earth, than to diſſipate, by his Apparitions, all the Clouds which could darken our Faith. Therefore he uſed to ſpeak with his Diſciples, to dwell, and eat with them; and to ſuffer that thoſe who doubted, ſhould feel him, with ſome Curioſity: He entered, while the Doors were ſhut, the Places where his Apoſtles were aſſembled, and would give them the Holy Ghoſt by breathing on them. He enlightened their Mind with a celeftial Light, to make them underſtand the ſacred Scripture; but, at the ſame Time, he would ſhew them the Cicatrices of the Nails, and all the Marks of the Paſſion he had lately ſuffered, ſaying to them, ſee my Feet and my Hands, it is myſelf; feel and ſee that a Spirit has neither Fleſh nor Bones, as you ſee me have; to teach them thereby, that the Properties of the divine, and of the human Nature, remained in him without Diviſion; and that we ſhould know that the Word is not what the Fleſh is, but that the Son of God is together, Fleſh, and the Word.

But *Eutyches* ſhews but too well, that he conceives nothing of that Myſtery of the Faith, in reſuſing to acknowledge our Nature in the Son of God, either by the Mortality to which his Fleſh has been ſubject, or by the Glory of his Reſurrection, without being afraid of this Sentence of the Apoſtle and Evangeliſt *St. John, Whoever confeſſes that Jeſus Chriſt is come with a true Fleſh, is of God; and whoever divides Jeſus*

Chriſt is not of God, but is the Antichriſt. And what is to divide *Jeſus*, but to ſeparate him from the human Nature; and to deſtroy by chimerical and imprudent Inventions, the Sacrament of the Faith, whereby we are ſaved? But he who is blind on the Nature of Chriſt's Body, muſt alſo, thro' the ſame Blindneſs, advance ſome Follies on his Paſſion. For if he does not believe that the Croſs of the Lord is falſe, if he does not doubt that the Supplice he has ſuffered for our Salvation is true; he muſt acknowledge a true Body in him, whoſe Death he believes, and not deny that he whom he knows to have been paſſible, has had a Body like ours; becauſe to deny a true Fleſh, is to deny, by a neceſſary Conſequence, a corporeal Paſſion.

Therefore, if he receives the Chriſtian Faith, and does not ſtop his Ears to the Doctrine of the Goſpel; let him conſider, which Nature has been pierced with Nails, and fixed on the Croſs, and viewing the Side of the crucified open'd with the Launce of the Soldier, let him underſtand from whence the Blood and Water did run, that the Church of God might have a Bath to waſh herſelf in, and drink to quench her Thirſt. Let him hear the bleſſed Apoſtle ſay, that the Sanctification of the Spirit has been made by the Aſperſion of the Blood of that *Chriſt*; let him read with Attention, theſe other Words of the firſt of *St. Peter*, *i. Know that you were not redeemed with corruptible Things, as Silver and Gold, from your vain Converſation, received by Tradition (that is to ſay from Idolatry) but with the precious Blood of Chriſt, as of a Lamb without Blemiſh, and without Spot.* Let him not reſiſt the Teſtimony of the bleſſed *John*, who ſays, *1 John, ii. The Blood of Jeſus, Son of God, cleanses us from all Sin.* And in another Place, the Victim which triumphs over the World is our Faith, and who is he that triumphs over the World, but he who believes that *Jeſus Chriſt* is the Son of God. It is *Jeſus Chriſt* who is come by Water and by Blood, and not by Water alone, but by Blood and by Water; and the Spirit teſtifies that *Chriſt* is the Truth; becauſe Three in Heaven bear witneſs to him, the Spirit, the Blood, and the Water: And theſe Three are but One; that's to ſay, the Spirit of Sanctification, the Blood of Redemption, and the Water of Baptiſm; three Things which are but one, and which remain undivided, without being ſeparated from one another, becauſe the Catholick Church lives and increaſes by Faith, which is the Cauſe why we neither believe a Divinity without a true Humanity in *Chriſt*, nor an Humanity without a true Divinity.

But when *Eutyches* answered, when you examin'd him, *I confeſs two Natures in our Lord, before the Aſſumtion or Union*, I am ſurpriſed that ſo abſurd, and ſo perverſe a Confeſſion, has been objected againſt by none of the Judges, and that a Diſcourſe ſo ſilly, and ſo blaſphemous, has been left to paſs, as if nothing had been heard which could offend the Ears. For there is as much Impiety to ſay, that before the Union there were two Natures in *Jeſus Chriſt*; as there is Wickedneſs to maintain, that after the Union there is but one. And that *Eutyches* may not imagine, that this Manner of ſpeaking is either right or tolerable, becauſe neither of you has refuted it, we adviſe your Dilection, beloved Brother, to take Care, if by God's Mercy this Affair takes a Turn to the Satisfaction of the Church, that the Spot of this bad Sentiment, advanced by that Man, as imprudent as he is ignorant, be blotted thro' your Care and Diligence. For (as we have learn'd by the Synod's Acts) he had very well begun to quit his bad Opinions, when being preſſed by your Judgment, he began to ſay what he had not ſaid before, and to acquieſce to the Faith he was far off; but as he would not ſubſcribe to the Anathema of his impious Dogma, your Paternity diſcovered that he remained ſtill in his Perſidy, and deſerv'd to be condemned.

However, if at preſent he repents ſincerely of what he has done, if he acknowledges with how much Reaſon the episcopal Authority has been excited

Splendor of the Truth; why would he not submit himself to the Authority of the evangelical Doctrine, in St. Matthew, who says, the Book of the Genealogy of Jesus Christ, Son of David, Son of Abraham? Why would he not hear the apostolical Predication of St. Paul, who, writing to the Romans, begins thus: *Paul a Servant of Jesus Christ, called to be an Apostle, separated unto the Gospel of God (which he had promised before by his Prophets in the Holy Scriptures) concerning his Son Jesus Christ our Lord, which was made of the Seed of David according to the Flesh?* Why would he not consult, with Attention and Care, the Writings of the Prophets, and he had found the Promise God made to Abraham, saying, *Genes. xxii. And in thy Seed shall all the Nations of the Earth be blessed.* And not to be in doubt of him, who was to be that Seed, he had followed the Apostle, who speaks thus: *The Promises have been made to Abraham and to his Seed.* God does not say Seeds, as if there were several, but to thy Seed, as speaking of one alone, which is Christ. He had inwardly conceived what *Isaiah* says, Chap. vii. *Behold a Virgin shall conceive and bear a Son, and shall call his Name Emanuel;* which signifies, God with us. He had read these Words of the same Prophet, Chap. ix. *Unto us a Child is born, unto us a Son is given, and the Government shall be upon his Shoulder: And his Name shall be called Wonderful, Counsellor, the mighty God, the Everlasting Father, the Prince of Peace.*

He would not abandon himself to say, without Reason, that the Word has been in such a Manner made Flesh, that Christ being come from the Womb of the Virgin, had the Form of Man, but had not the Truth of the maternal Body; because the Angel sent to Mary, says to her; *The Holy Ghost shall come upon thee, and the Power of the Highest shall overshadow thee: therefore also that holy Thing which shall be born of thee, shall be called the Son of God.* As if because the Conception of the Virgin has been a divine Operation, the Flesh of the Infant conceived was not the Nature of the Mother conceiving: But that Generation singularly marvellous, and marvellously singular, must not be understood so that by the Novelty of the Creation, the Truth of the Nature be destroyed. For the Holy Ghost has given the Fecundity to the Virgin, and the Truth of the Body of Jesus Christ has been taken from the Body of his Mother. And the supreme Wisdom building to himself a House, *The Word was made Flesh and dwelt among us;* that is to say, in the Flesh he has taken from Man, and which was animated with a rational Soul. Therefore each Nature preserving its Property, and uniting in one Person, a low Condition has been taken for Majesty, Infirmary for Power, Mortality for Eternity: And to pay the Debt of Men, the inviolable Nature has united herself to a passible Nature, that our Remedy being proportioned to our Malady, the only Mediator between God and Men, Jesus Christ a Man, could die as Man, and not die as God.

Therefore the true God is born with the perfect Nature of a true Man, possessing all that's his own, and all that's ours. I call ours the natural Advantages in which God created us at the Beginning, and which Christ is come to repair; for what the deceiving Devil has stolen into human Nature, and which the deceived Man has received, has not had the least Place in Christ; and we must not imagine, that because he is enter'd into the Society of our Infirmities and Miseries, he has also participated to our Sins. He has took the Form of a Slave, without taking the Sin, raising the Humanity to a higher Degree, without debasing the Divinity; because that Humiliation, whereby the Invisible has render'd himself Visible; and the Creator and Master of all Things would become one of the mortal Kind; has been an Humiliation of Mercy, and not a Defect of Power; for each Nature has, without Defect, retain'd its Property: And as the Form of God has not took off the Form of Man, likewise the Form of God has not took off the Form of Slave. The Devil glorified himself, that Man, deceived by his Fraud, was deprived of the Ad-

vantages he had received from God, and that having lost the Gift of Immortality, he was under a Sentence of Death. He gloried that God, by his Justice ordering it thus, had changed his Will for Man, whom he had created in so high a State of Honour; and it was a Sort of Consolation for him, in his Misfortune, to have a Companion of his Fault. Therefore it was necessary, that by the secret Conduct of an adorable Council, God, who is immutable, and whose good Will cannot be deceived in his Designs, should accomplish the first Resolution of his Mercy, by a hidden Mystery; that Man, whom the Devil had prompted to Sin by his Artifices, should not perish; God wanting to save him.

Therefore, the Son of God enters this sublunary World, descending from the celestial Throne, without departing from the Glory of his Father, and being begotten by a new Birth, and of a new Order. There is a new Order, because he being invisible in his Nature, he has rendered himself visible to ours. The incomprehensible would be comprised; he who was before all Times, would begin to live in Time. The Lord of this vast Universe has took the Form of a Slave; veiling the Immensity of his Majesty, under the Cloud of a Body. The Impassible has made himself capable to suffer, and the Immortal would be subject to Death. There is a new Nativity, because the inviolable Virginity of Mary, having not the least Motion of Concupiscence, has furnished the Matter whereof that Body was formed. The Nature, then, has been taken from the Mother of the Lord, and not the Sin; and from that the Nativity of Jesus Christ conceived in the Womb of the Virgin, is miraculous, it must not be concluded, that the Nature is different. For he who is true God, is also true Man; and there is no Falshood in that Union, where the Meanness of Man is found united with the Sublimity of the Divinity; and whereas God is not changed by the Humiliation his Mercy has reduced him to, Man is not consumed by the Dignity to which he is rais'd; one Nature acts with a reciprocal Communication of its Properties to the other. The Word co-operating what is of the Word, and the Flesh exercising what is of the Flesh. The one shines with Miracles, and the other is conquered by Miseries. And as the Word has not lost the Quality of the paternal Glory; thus the Flesh has not quitted the Nature of the human Race. For the same (which must be often repeated) is truly the Son of God, and truly the Son of Man: God, because the Word was at the Beginning, and the Word was in God, and God was the Word: Man, because the Word has made himself Flesh, and has inhabited within us: God, because all Things have been made by him, and nothing has been made without him: Man, because he has been form'd of a Woman, and form'd under the Law.

The Nativity of the Flesh, is the Manifestation of the human Nature; and the Delivery of a Virgin, is the Proof of the divine Power. The Infancy of the little one, is shewn by the Humility of the Manger; and the Power of the Almighty, is declared by the Canticks of the Angels. He whom the impious Herod attempted to put to Death, is semblable from the Beginning of his Life to the other Children of Men: But he whom the Magi come to adore, with so much Humility, is the Master of all. When he presented himself to the Baptism of John his Precursor, lest his Divinity should remain hid under the Veil of his Flesh, the heavenly Father caused this Voice to be heard from Heaven, *This is my beloved Son.* He whom the Deceit of the Devil has dared to tempt as a Man, in the Desert, receives there as God, the Services of the Angels. To be hungry, to be thirsty, to be fatigued, to sleep, it is certainly a human Thing; but to feed five thousand Men with five Loaves, to give to the Woman from Samaria Water of Life, which quenches the Thirst for ever, to walk on the Sea without sinking, to appease the Rage of Winds, by commanding the Tempest, is certainly a divine Thing. Therefore, (that I may pass by several other Things in Silence) as it is not

not the Property of one and the same Nature, to mourn a Friend deceased, by a Motive of Tenderness and Affection, and to raise him from the Dead by the sole Command of his Word; to be crucified, and to change the Day into Night, and to throw all the Elements into Confusion; to be nailed, and open the Gates of Heaven to a Thief: Likewise, it is not a third Nature, who says, *I and my Father are one, and my Father is greater than me.*

Though in *Jesus Christ* our Lord, God and Man there is but one Person, notwithstanding, he is both equal and inferior to his Father; from us he holds his Humanity, which renders him less than his Father; from the Father he holds the Divinity, which renders him equal to him, because of the Unity of the Person, which must be understood in his double Nature. It is said that the Son of Man is descended from Heaven, when the Son of God has took his Flesh from the Virgin, from whom he is born; and again, that the Son of God has been crucified and buried; tho' he has not suffered those Things in his Divinity, whereby he is consubstantial and coeternal with his Father, but in the Weakness of the human Nature; whence we all confess in the Symbol, that the only Son of God has been crucified and buried, according to what the Apostle says, *1 Cor. ii. If they had known it, they would not have crucified the Lord of Glory.* When that same God, our Lord and Saviour, instructed his Apostles in the Faith, in asking them, whom *Men said the Son of Man was?* His Disciples declar'd to him the various Opinions Men had of him. But you, continued he, whom say you that I am, who am the Son of Man, and whom you see in the Form of a Slave, and covered with human Flesh? Then the blessed *Peter*, being divinely inspir'd, made that Confession, so glorious to both Natures, *Thou art Christ the Son of the living God.* After this, it was not without Reason, the Lord pronounced that he was blessed; and that he extracted from the principal and fundamental Stone, the Solidity of his Name, and of his Virtue; he, who by the Revelation of the Father, had confess'd that the same Person was the Son of God and the Christ; because the Confession of the one, could not be useful to Salvation, unless the Confession of the other was joined to it; and that there was an equal Peril for the Faith, to believe that our Lord *Jesus Christ* was God only, or to believe that he was Man only.

But after the Resurrection of the Lord, who has been of a true Body, for he is not risen another, than he who had been crucified and buried; what else has he done, during the forty Days he remained upon Earth, than to dissipate, by his Apparitions, all the Clouds which could darken our Faith. Therefore he used to speak with his Disciples, to dwell, and eat with them; and to suffer that those who doubted, should feel him, with some Curiosity: He entered, while the Doors were shut, the Places where his Apostles were assembled, and would give them the Holy Ghost by breathing on them. He enlightened their Mind with a celestial Light, to make them understand the sacred Scripture; but, at the same Time, he would shew them the Cicatrices of the Nails, and all the Marks of the Passion he had lately suffered, saying to them, see my Feet and my Hands, it is myself; feel and see that a Spirit has neither Flesh nor Bones, as you see me have; to teach them thereby, that the Properties of the divine, and of the human Nature, remained in him without Division; and that we should know that the Word is not what the Flesh is, but that the Son of God is together, Flesh, and the Word.

But *Eutyches* shews but too well, that he conceives nothing of that Mystery of the Faith, in refusing to acknowledge our Nature in the Son of God, either by the Mortality to which his Flesh has been subject, or by the Glory of his Resurrection, without being afraid of this Sentence of the Apostle and Evangelist *St. John, Whoever confesses that Jesus Christ is come with a true Flesh, is of God; and whoever divides Jesus*

Christ is not of God, but is the Antichrist. And what is to divide *Jesus*, but to separate him from the human Nature; and to destroy by chimerical and imprudent Inventions, the Sacrament of the Faith, whereby we are saved? But he who is blind on the Nature of Christ's Body, must also, thro' the same Blindness, advance some Follies on his Passion. For if he does not believe that the Cross of the Lord is false, if he does not doubt that the Supplice he has suffered for our Salvation is true; he must acknowledge a true Body in him, whose Death he believes, and not deny that he whom he knows to have been passible, has had a Body like ours; because to deny a true Flesh, is to deny, by a necessary Consequence, a corporeal Passion.

Therefore, if he receives the Christian Faith, and does not stop his Ears to the Doctrine of the Gospel; let him consider, which Nature has been pierced with Nails, and fixed on the Cross, and viewing the Side of the crucified open'd with the Lance of the Soldier, let him understand from whence the Blood and Water did run, that the Church of God might have a Bath to wash herself in, and drink to quench her Thirst. Let him hear the blessed Apostle say, that the Sanctification of the Spirit has been made by the Asperision of the Blood of that *Christ*; let him read with Attention, these other Words of the first of *St. Peter, i. Know that you were not redeemed with corruptible Things, as Silver and Gold, from your vain Conversation, received by Tradition (that is to say from Idolatry) but with the precious Blood of Christ, as of a Lamb without Blemish, and without Spot.* Let him not resist the Testimony of the blessed *John*, who says, *1 John, ii. The Blood of Jesus, Son of God, cleanses us from all Sin.* And in another Place, the Victim which triumphs over the World is our Faith, and who is he that triumphs over the World, but he who believes that *Jesus Christ* is the Son of God. It is *Jesus Christ* who is come by Water and by Blood, and not by Water alone, but by Blood and by Water; and the Spirit testifies that *Christ* is the Truth; because Three in Heaven bear witness to him, the Spirit, the Blood, and the Water: And these Three are but One; that's to say, the Spirit of Sanctification, the Blood of Redemption, and the Water of Baptism; three Things which are but one, and which remain undivided, without being separated from one another, because the Catholick Church lives and increases by Faith, which is the Cause why we neither believe a Divinity without a true Humanity in *Christ*, nor an Humanity without a true Divinity.

But when *Eutyches* answered, when you examin'd him, *I confess two Natures in our Lord, before the Adunation or Union,* I am surpris'd that so absurd, and so perverse a Confession, has been objected against by none of the Judges, and that a Discourse so silly, and so blasphemous, has been left to pass, as if nothing had been heard which could offend the Ears. For there is as much Impiety to say, that before the Union there were two Natures in *Jesus Christ*; as there is Wickedness to maintain, that after the Union there is but one. And that *Eutyches* may not imagine, that this Manner of speaking is either right or tolerable, because neither of you has refuted it, we advise your Dilection, beloved Brother, to take Care, if by God's Mercy this Affair takes a Turn to the Satisfaction of the Church, that the Spot of this bad Sentiment, advanced by that Man, as imprudent as he is ignorant, be blotted thro' your Care and Diligence. For (as we have learn'd by the Synod's Acts) he had very well begun to quit his bad Opinions, when being pressed by your Judgment, he began to say what he had not said before, and to acquiesce to the Faith he was far off; but as he would not subscribe to the Anathema of his impious Dogma, your Paternity discovered that he remained still in his Perfidy, and deserv'd to be condemned.

However, if at present he repents sincerely of what he has done, if he acknowledges with how much Reason the episcopal Authority has been excited

cited against him; and if to give an entire Satisfaction, he renounces, and condemns openly, and by his Submission, the bad Opinions he has maintain'd, the Mansuetude, and Compassion he is to be treated with, after his Correction, will not be blameable. For our Lord, who is the true and good Pastor, who came to give his Life for his Sheep, to save the Souls, and not to lose them, wills we should imitate his Mansuetude; and that as Justice ought to punish obstinate Sinners, Mercy should not reject those who renounce their Sins. For true Faith is never advantageously defended, but when the false Opinion opposed to it is condemned by his own Partisans. Therefore to terminate all this Affair piously and faithfully, we have sent in our Place our Brothers, *Julian* and *Renatus*, Priests of the Title of St. *Clement*, and the Deacon *Hilary* my Son, to whom we have join'd *Dulcitius* our Notary, of an experienced Fidelity; hoping that the Grace of God will not fail on that Occasion, and that it will move the Heart of him who has advanced these Errors; that renouncing them he may be saved. God keep you in Health, dearly beloved Brother.

Given in the Ides of *June*, under the Consulate of *Asterius* and *Protophenes*.

Pope *Leo* wrote several other Epistles to *Pulcheria*, on the Occasion of the Council which was convoked, to recommend his Legates to her; to *Julian* Bishop of *Coos*, a very eloquent Prelate, and very zealous for the Defence of the Faith; to *Faustus*, and to *Marcian*, Abbots of *Constantinople*, and to the Fathers assembled at *Ephesus*. In this last, he says at the Beginning, 'That the religious Faith of the most clement Prince, knowing that his Glory was interested, that in the Catholick Church no Seed of Error should pallulate, had had that Deference for the divine Institution, to join the Authority of the Apostolical See, to make the Effect of his holy Disposition succeed: As if he had wished that St. *Peter* himself had declared, what has been prized in his Confession, thereby, in few Words, the Prince of the Apostles, had explained the Plenitude of his Faith, saying, *Thou art Christ the Son of the living God*. That if *Eutyches* had understood and believed that Truth, he had not deviated from the true Way of the Faith; and that since the most Christian Emperors wanted, that an Episcopal Council should be assembled, he did send his Legates to it to assist in his Place, in the Assembly of their Fraternity; and to establish, with an unanimous Consent, the Things which should be judged agreeable to God.'

Eutyches, on his Side, wrote to several of the most considerable Bishops of the West, among whom *Peter Chrysologus*, who govern'd then the Church of *Ravenna*, made him a marvellous Answer.

The Council which had been convoked for the First Day of *August*, began the Tenth; all that was transacted in it is clearly and impartially related in my Treatise of the Councils.

In this Brigandage of *Ephesus*, *Eutyches* was absolved, and his Heresy approved; *Flavian* Bishop of *Constantinople* was murder'd, even by *Dioscorus* himself (if we believe *Euvagrius*) tho' *Marcellinus* in his Chronicle, and the Manuscript of the Vatican, say, that *Dioscorus* sent him into Exile, in the City of *Epepe* in *Lydia*, which *Ptolomeus* calls *Ihyepa*, and that he died there of the Wounds he had received in *Ephesus*, and of the Fatigues he endured in the Place of his Banishment. *Dioscorus* deposed likewise *Ibas* of *Edeffa*, and *Theodoret* of *Cyr*; or rather, he declared the last deposed by the first Council of *Ephesus*, as Partisan of *Nestorius*, in whose Favour he had wrote against the Articles of St. *Cyril*.

As soon as *Theodoret* heard of the Sentence given him, he appeal'd to the Pope, and wrote to the Patriarch *Anatolius*, to desire him to obtain from the Emperor Leave, to go into the West to be judged by the most holy Bishops, and most beloved of God, of those Places; or if he would not grant him that Liberty, that he may be permitted to confine himself

in his Monastery, which was a hundred and twenty Miles distant from *Cyr*. *Theodosius* refused him those two Things, condemned his Writings to be burnt, with those of *Porphyrius*, and of *Nestorius*, and confirmed the Council of *Ephesus* as Œcumenical; decreeing very great Punishments against those who refused to submit themselves to it. The Emperor acted thus, not with any Design to establish the Heresy, but, on the contrary, thinking to defend the Truth, which he had not Light enough to discern, being entirely under the Government of *Chrysophius*, the Protector and Partisan of *Eutyches*, who abused his good Intentions, and made use of him, as of an Instrument, to gratify his private Piques and Passions; notwithstanding which, *Theodosius* was inexcusable, since he was obliged to govern by himself, or to chuse faithful Ministers, and capable to supply his Place; for if he had been pleased to take the Pains himself to examine this grand Affair, he had easily discovered the Passion which prompted *Dioscorus* and his Partisans to act against those good Bishops they accused. Complaints have always been made against this Weakness in Princes; since it is very rare to find any capable to sustain the Weight of their Dignity. Therefore *Theodoret* was forced to content himself by sending *Hypatius* and *Abramius*, rural Deans of his Diocese, and *Alypius* Abbot of *Cyr*, to *Leo* with a Letter, in which he tells him, 'That he expected the Judgment of the Apostolical See; and desired him that he would be pleased to command him to come to him, to give him an Account of his Doctrine, and of his Writings, and not to despise his unhappy old Age, which, after so many Toils and Fatigues, had been so cruelly treated; and above all, that he would inform him, if he must acquiesce to his Deposition, or not; protesting, that if he commands him to abide by the Things which have been already judged, he would do it; and never more importune any Body, but wait the inflexible Judgment of God; minding neither Glory nor Honour: But being moved at the Scandal, which caused in the Church the unjust Proceeding of the Bishops assembled at *Ephesus*, which could give Room to the Ignorant, who were not inform'd of the Truth, to suspect him of Heresy.'

Theodoret speaks in the same Manner, in his Letter to the Priest *Renatus*, who had been Legate at the false Council of *Ephesus*. The Pope, as the Commissaries of *Marcian* at the Council of *Chalcedon* witnessed it, receiv'd him into his Communion, and judged that he ought to be re-established. Notwithstanding the Year following he was still in Pain; but some time afterwards, *Theodosius* gave him his Liberty. All the Persecutions he suffer'd could not so much as shake his Constancy; or engage him to seek the Favour either of *Chrysophius*, or of the other Persons who were in some Credit at Court. None but *Sporatius*, Count of the Domesticks, would espouse his Defence; because he was not afraid of the Credit of the Favourite, and knew the Purity of his Faith, though reproached by his Enemies with favouring the Errors of *Nestorius*. Whatever they could do against him, he never ceased of declaiming against the unfortunate Council, where the Catholick Faith had been condemned: And answer'd *Arianus*, (*Epist.* 122, 123.) who advised him to forbear speaking so openly, lest he should still more irritate the Emperor: 'That knowing his good Intention, he thank'd him for his Advice; but could not receive it, because the divine Apostle commanded the contrary: That for him he was afraid of nothing; and that far from being afflicted at the Miseries he suffer'd in his Exile, he was full of Joy; and blessed him, who had render'd him worthy of suffering something for his Name.' *Uranus* having received that Answer, wrote to him again, and sent him some Alms for his Subsistence; which he received willingly, as coming from his Friend, having refused those which some other Bishops had sent him; not by Scorn, but to keep the Poverty, which he reputed an inestimable Treasure.

Treasure. Several of his Brother Bishops had abandon'd him; the one because they maintained the Heresy of *Eutyches*, and the others because he was out of Favour at Court, with which they were not willing to quarrel for his Sake; though they condemned in their Heart the Persecution he suffer'd for the Defence of the Church. Such was a Prelate call'd *Romulus*, to whom he writes a Letter full of Friendship, to excuse the Timidity which hinder'd him from professing openly the orthodox Doctrine, though he did it in secret. Certainly the Fear of a secular Power, in Matters of Religion, is not pardonable to a true Christian, who ought to confess *Jesus Christ* before Man, if he wants that Christ should confess him before his Father. But it is abominable in Bishops, who are oblig'd to be an Example of Courage and Intrepidity to their Flock, and who by acting otherwise are Wolves, and not true Pastors.

The Legate *Hilary* having informed Pope *Leo* of the Condemnation of *Flavian*, and of the other Orthodox Bishops; to remedy to all those Disorders, he assembled a Synod at *Rome* of the Bishops of the West, where he annulled all that had been done in the Conciliabulum of *Ephesus*. *Hilary* took care to inform *Pulcheria* of it, desiring her at the same Time, to continue to defend the Faith, always with the same Courage and Intrepidity. *Leo* wrote to her likewise, in the Name of the Synod, and to *Theodosius*, to intreat him, in the Name of all the occidental Churches, to suffer, that Things should remain in the same Condition, they were before the Council held at *Ephesus*, till another greater, composed of all the Bishops of the World, could be assembled; and to order that it should be held in *Italy*, to judge of the Opposition of his Legates, and of the Appeal *Flavian* had intrusted them with; whereby to pacify in such a Manner all Things, and to reunite so well all Minds, that no doubt should remain on the Faith, nor any Bitterness against the fraternal Charity. Three Days afterwards the Synod address'd two Letters to the Church of *Constantinople*, and to the Archimandrites, which were carried by *Epiphanius* and *Denis*, Notaries of the *Roman* Church; in which, protesting of never admitting to their Communion, nor of reckoning among the Bishops him who might be put in *Flavian's* Place, they condemn with Execration the Heresy of *Eutyches*, and exhort the Faithful to suffer any Thing rather than abandon the Faith.

The Emperor *Valentinian*, *Placidia*, his Mother, and the young *Eudoxia* his Wife, happening to be at *Rome* in the Month of *November*, for the Feast of the Dedication of *St. Peter's* Church; *Leo*, environed with a great Number of Bishops who had assisted at the Council, address'd himself to them, and being yet at the Altar, made them with Tears, the Recital of what had been done at *Ephesus* against the Faith, and against *Flavian*, because he had appealed to the apostolical See, and to the Western Bishops, imploring their Authority. To apply some Remedy to those Evils, they all three wrote to *Theodosius* to desire him to refer the Judgment of *Flavian* to a Council, and would give Leave that it should be assembled in *Italy*. *Theodosius* answer'd them every one in particular; declaring that 'his sole Intention had been to preserve the Religion he had received from his Ancestors; and for that Subject having caused a Council to be assembled at *Ephesus*, the Question had been examined in Presence of the Bishops, with all sort of Liberty; that those had been deposed from the Sacrament who had been thought deserving that Punishment, and among others *Flavian*, as Author of a dangerous Novelty; and that by those Means Peace had been restored to the Churches; therefore there was no need of another Council.'

Dioscorus, who hated mortally Pope *Leo*, for having declared himself so openly against the Heresy of *Eutyches*, excommunicated him at his Return into his Diocese of *Alexandria*, where he assembled a Synod of his Bishops; but ten only had part in that sacrilegious Undertaking. For the others, though infected with

Eutyches's Heresy, had not the Temerity to subscribe to the Condemnation of the Pope. *Theodoret* wrote on that Subject (*Epist.* 125.) to *John*, Bishop of *Germania*, where he declares that 'he fears a general Apostasy in the East, seeing that those who wished (as they said) for Things which had pass'd at *Ephesus*, far from being touched with Repentance; added Injustice to Injustice, and Impiety to Impiety; and that the others had not Courage enough to condemn publickly, the Evil they had done.' Therefore we see that the Eastern Church was governed in those unfortunate Days, by so pusillanimous and weak Bishops, that they consented to the Evils they did not approve, for Fear of disobliging the Emperor, or rather his Favourite *Chrysophius*, who governed him; and who abused his Authority.

Pulcheria seeing the Faith attacked from all Parts, and her Brother engaged by that wicked Minister, to oppress it, quitted the Solitude where she had retired, and returned to Court; where she soon changed, by her Presence, the Face of the Affairs. For she made *Theodosius* so sensible, that *Chrysophius* had abused his Authority, by engaging him to protect *Eutyches*, who was a detestable Heresiarch, against *Flavian* and the other Orthodox Bishops; that the Emperor, touched with an extreme Repentance, repaired his Fault as well as he could. He banished *Chrysophius* after he had divested him of all his Dignities, and confiscated his Estate. *Pulcheria* (says *Nicephorus*, *Lib.* 14. c. 49. and *Marcell. Chr.*) deliver'd him into the Hands of *Jordan*, the Son of a Man of Quality, whom he had caused to be put to Death. The divine Justice made use of *Jordan* to rid the World of a wicked Minister, who, to gratify his particular Hatred against *Flavian*, had almost ruined the Church. *Theodosius*, not yet satisfied with this Act of Justice, he ow'd to Heaven and to his Subjects, reprimanded severely *Eudoxia* his Wife; who had helped to deceive him, and reproach'd her with the Disgrace of *Pulcheria*, and her Intelligence with *Paulin*, in such bitter Terms, that being frighted at it, she ask'd him, as a Favour, Leave to retire; and to go and visit the holy Places of *Jerusalem*. He sent her to the same Place, where her Intrigues had oblig'd *Pulcheria* to retire; afterwards, to give a publick Testimony of the Honour he had for the Mother of God, he changed a Synagogue of the *Jews* into a Church, which he had dedicated in her Honour.

Marcian having ascended the imperial Throne, by his Marriage with *Pulcheria*, at *Theodosius's* Death, which happened soon after his Reformation, published three Days after his Election, a very rigorous Law against the Clerks and Monks, who should desert the Orthodox Religion, to follow the Heresy, and the abominable Dogmas of *Apollinarius* and *Eutyches*; subjecting them to all the Punishments decreed by his Predecessors against the Hereticks. He wrote also, at the same Time, a very respectful Letter to Pope *Leo*, whereby 'he desires his Holiness to ask for him the Grace of governing well the Empire, and of maintaining the Christian Religion: That the Error being abolished by the Synod which was to be celebrated under his Authority, Peace may be restored among the Bishops, and the Orthodox Doctrine remain pure and entire.'

The new Emperor, to give convincing Proofs of the Sincerity of his Intentions, recalled from their Exile all the Bishops who had been deposed or banished by the false Council of *Ephesus*, and sent them back to their respective Diocese.

The Legates sent by Pope *Leo* to *Marcian*, having found near him all the Protection they could desire, applied themselves, soon after their Arrival, to execute their Commission for the Re-union of the Oriental Churches, and for the Re-establishment of the Bishops fallen into the Heresy. *Anatolius*, who had been newly elected Bishop of *Constantinople* to succeed *Flavian*, assembled by their Order, a Synod of Bishops, Abbots, Priests, and Deacons, where was first read, the Epistle of Pope *Leo* to *Flavian*. After they had all heard it, they declared that it was conformable to the

Doctrine

Doctrine of the holy Fathers, and contained the true Doctrine of the Faith. *Anatolius* was the first who subscribed to it, and pronounced Anathema against *Eutyches* and against *Nestorius*; in which he was followed by all those who were in the Assembly. Afterwards it was resolved that the same Epistle should be sent to the absent Bishops, who should be obliged to subscribe to it. For those who had composed the *Conciliabulum* of *Ephesus*, if they abjured their Error, and asked the Communion of the Apostolical See, that of their particular Church should be granted to them, but not that of the universal Church, reserving to *Leo* their entire Re-establishment in the general Council which was to be held; likewise the Deposition of those who would refuse to sign the Confession of Faith proposed to them.

The Legates sent to the Pope a Relation of what had passed at *Constantinople*; and a Letter of *Anatolius*, which contain'd his Profession of Faith. As soon as he had received it, he answer'd it, (*Epist.* 40.) and declared that he had unspeakable Joy to see him in those orthodox Sentiments; hoping that the Church committed to his Care would become soon, by the Purity of his Faith, without Spots and Wrinkles. Towards the End he observes to him, 'That *Dioscorus* of *Alexandria*, *Juvenalis* of *Jerusalem*, and *Eusebius* of *Beirite*, ought not to be named in the Celebration of the sacred Mysteries; it being wicked, and very indecent, to mix among the Names of the holy Martyrs, the Names of those who have persecuted the Catholics.' He recommends to him the Clerks of *Flavian*, that he may receive them to his Communion; and exhorts him to take Care of the Church of *Eusebius* of *Dorylaea*, who, at that Time, was at *Rome*. He wrote the same Day, which was the Thirteenth of *April*, a Letter to *Marcian*, and to the Empress *Pulcheria*, to thank them for the favourable Reception they had given to his Legates, for the Re-establishment of the Bishops deposed by the Hereticks, and for their Zeal against the Heresy of *Eutyches*, and of *Nestorius*.

At last the Œcumenical Council, which was to cause the entire Ruin of *Eutyches* and of his Partisans, was convoked by the Emperor *Marcian*, with the Consent of Pope *Leo*, first at *Nice*, but afterwards transferr'd to *Chalcedon*, for Reasons of State: In that Council *Eutyches* and his Partisans, that's to say those who persisted obstinately in their Error, were deposed and anathematized, and most of them sent into Exile with *Eutyches*, as may be seen in my Treatise of the Councils.

The *Egyptian* Bishops, who had assisted at the Council, at their Return into *Alexandria*, assembled the principal Persons of the City, to proceed to the Election of a Bishop in the Place of *Dioscorus*, who had been deposed and banished. There was some Difficulty at first to make them resolve on the Ordination of a new Pastor, because it seemed to them, that *Dioscorus* being yet alive, it was committing a spiritual Adultery to give him a Successor; but at last, says *Evagrius*, *Lib.* 2. c. 5. they agreed on the Person of *Proterius*, who was accordingly ordained by the Bishops. Soon after this Ordination the People assembled in a tumultuous Manner, and caused a great Sedition; the one asking that *Dioscorus* should be restored to them, and the others maintaining *Proterius*; and private Interests intervening with the publick Quarrel, from Words they came to Blows, and several were kill'd on both Sides. The Governor of *Thebaides* happening to come at that Time to *Alexandria*, with Soldiers, the Seditious attack'd them, and having forced them to take Sanctuary in a Church, they burnt them there alive. The Emperor being inform'd of those Disorders, sent thither two Thousand Men, who went from *Constantinople* to *Alexandria* in two Days, their Insolence rekindled the Sedition, and this second was still more cruel than the first. The People being in the Circus forced *Florus* Governor of the City, to restore to them the Distribution of the Corn, the Baths, the Spectacles, and all that had

been taken from them, for Chastisement of their Mutiny; and that Magistrate did not shew a little Dexterity in appeasing them for some Time. Notwithstanding *Proterius* ran in Danger every Day of losing his Life, and was obliged to have himself guarded by Soldiers, for fear *Dioscorus*'s Partisans should sacrifice him to their Vengeance. It is a Thing almost incredible, that a Bishop so discredited by his Violences, Cruelties, Schism, Heresy, and Sacrileges, not only could find so much Support, and good Will, among the People of *Alexandria*; but that his Name should be still in Veneration among several People in the East, who honour him as a Saint, and are ready to die in the Defence of his Errors.

The Emperor *Marcian*, instead of exterminating those of *Alexandria*, attempted to bring them to a Submission to the Council of *Chalcedon*, by fair Means, and for that Purpose, sent to them one of the Commissioners who had assisted at it, by his Orders, called *John*, a very pious and very eloquent Man. He judged him proper to let them know, that nothing new had been decreed in that Council, but that all the Determinations had been made according to the Rules of the Council of *Nice*, and the Sentiments of *Atanasius*, *Theophilus*, and *Cyril*, their Bishops, so that in condemning its Decrees, they condemned, at the same Time, their Pastors and Doctors. But neither the Eloquence of that Magistrate, nor *Marcian*'s Letter could undeceive those, whom the Partisans of the Heresy of *Eutyches*, had so strongly pre-occupied, that they were no longer capable of rendering Obedience to the Truth established by the Council, nor to the Will of the Emperor.

There was no less Trouble in *Palestina*, on the same Subject. The Heretick Monks, who had assisted at the Council of *Chalcedon*, returned to their Monasteries, where they published, impudently, that the Fathers of that Council had established the Heresy of *Nestorius*, and condemned the true Faith. As those good Solitaries were ignorant enough, they were easily persuaded by those who had more Capacity. But as they had, likewise, a very great Zeal for the orthodox Doctrine, they abandoned themselves to almost incredible Violences. *Juvenalis* of *Jerusalem*, attempted in vain to undeceive them; they vexed him to that Excess, and made him so often run the Risque of his Life, that he was forc'd at last to fly to *Constantinople*, near the Emperor. Their Impiety went farther; for *Easter-Day*, they had the Temerity to ordain the Monk *Theodosius*, Chief of the Faction of the Hereticks, Bishop of *Jerusalem*; who, to signalize his new Dignity, he had acquired by all the Crimes the furious Zeal of an Heretick is capable of, burnt Houses, caused several Persons of Piety to be put to Death, and opened the Prisons to a great Number of Criminals who deserv'd Death; had the Gates of the City shut, and Leave granted to the greatest Ruffians to do what they would: So that under the Name of Bishop, he exercised all the Violences of a Tyrant; and as he could not procure the Death of *Juvenalis*, he discharg'd his Rage on *Servian* of *Scythopolis*, and on several other Priests, to whom he procured the Crown of Martyrdom. *Atanasius*, Deacon of *Jerusalem*, reproaching him publicly in the Church, of his Cruelties against the Flock of *Jesus Christ*, and its true Pastor, was carried off by his Satellites, and whipped to Death: He had his Body dragg'd thro' the City, and by a Cruelty which had been abhorr'd, even by the most barbarous Nations, commanded it should be given to the Dogs, who devour'd it. He extended his Fury over all the Churches and Cities of *Palestina*, against those who followed the orthodox Doctrine; in the one he deposed the orthodox Bishops, and in the other ordain'd those who followed his Heresy. He found Means to infect with his Errors, *Eudoxia*, who after the Death of the Emperor *Theodosius*, her Husband, had retired to *Jerusalem*; which unhappily engag'd her to authorize his Violences, and to engage all the Monks in his Party, who followed easily the Sentiments of a Princess, so considerable by her Piety.

Dorotheus,

Dorotheus, Governor of *Palestina*, being informed of the Violences exercised by *Theodosius* in *Jerusalem*, ran thither with Forces; but the Partisans of the Seditious, supported by *Eudoxia*, shut the Gates against him, and would not receive him, unless he would promise to espouse their Party, as the Clergy, the Monks, and the People had done. Thus the See of that holy City, was occupied during twenty Months by an Usurper, who committed all Sorts of Violences to keep it. At last, the divine Justice, which had made Use of him to exercise the Faith of the Faithful, punished him for his Wickedness. *Marcian*, to stop its Course, gave the Year following, express Orders to *Dorotheus*, to make him a Prisoner. *Theodosius* was apprised of it, and fled to the Mountain of *Sinai*. The Monks, and other Persons who had followed his Party, were punished with various Supplices, with as much Justice, as there had been Iniquity in the Disorders they had committed. They wrote to *Pulcheria*, a long Letter to complain of it, as of a Persecution, which they did not deserve. The Emperor *Marcian* made them an Answer, worthy of his Piety, wherein he reproached them, 'that, instead of remaining in Peace, of having themselves instructed by the Priests, and of obeying their Doctrine, as they were oblig'd by their Profession, they had undertook, by a violent Temerity, to make themselves Doctors of the People; and had vainly persuaded themselves, that they were rather to be followed in the Science of the Faith, than the holy Apostles, Prophets, and the Fathers of the Church: That they could not deny their having burnt Houses and Monasteries, the Murders, and other Violences they had committed in *Jerusalem*, as in a City taken by Storm, and of which he was very well inform'd: That he was very much surpris'd, that in anathematizing *Eutyches*, they would adhere to *Theodosius*, who followed all the Opinions of that Heresiarch, of *Valentin*, and of *Apollinaris*: That he was sure *Jesus Christ*, our Lord, would punish them for so many Impieties they had committed: That he had not commanded any Outrages should be offered to the Monks, but only, that the City of *Ælia* (that is to say *Jerusalem*) should be pacified, and that their Rebellion to his Orders, had been the Occasion of the Violences exercised against them: That he would order that an exact Information should be made of the Things the *Samaritans* were accused of, but that those Punishments could not affect them; they who had nothing to think of, but to follow the Faith he professed, and to remain in their Monasteries, to apply themselves to Prayer, and to the other Exercises agreeable to their Profession.' Towards the End, he forbids them the making henceforward, any Assembly contrary to the Canons, unless they be willing to incur the Pains established by his Predecessors against Hereticks; and tells them that *Jurvanalis* of *Jerusalem*, had employ'd himself near him, with a great deal of Zeal, to obtain their Pardon; which he grants, hoping that by their Repentance, they would expiate the Crimes they had committed.'

But as that Prince saw that the Devil put all in Use to lessen the Authority of the Council of *Chalcedon*, he appeared still more desirous to maintain it. He confirm'd it a-new by his Edicts, and caused one in particular to be published, to ascertain the Re-establishment of *Flavian*, which he directed to *Palladius*,

Prefect of the Pretory of the East. 'Glory, says he, is never smothered by a glorious Death, and Virtues, far from perishing with those who die, on the contrary, their Death increases their Reputation, because it dissipates all Sorts of Envy against them. Whence it happens, that we praise with so much Care the Actions of our Predecessors, that the Memory of honest Men is so much respected, and that all great Men have desired to make an End truly glorious, because they knew very well that those only die for ever, whose Life and Death are never mentioned. God's Judgment, and that of Men, have lately shewed, that this is true. For *Flavian* of religious and venerable Memory, having been deposed from the Episcopacy (tho' properly speaking, it was keeping it religiously in preserving the Faith, since such is a Bishop who is worthy of the Episcopacy) by Calumnies artificially invented; this great City has desired his Remains, with so much Zeal, and has received them with so much Respect, that he has appeared happier than those who were then living; and that his Death, which seemed deplorable, was desired by those who saw the Glory which it had acquir'd to him. God wanted, besides, to grant to his Merits the Testimony of the venerable Synod assembled at *Chalcedon*, and composed of a vast Number of Bishops, who having diligently examined the Questions of Faith, has forever established the Foundations of Religion, and give to *Flavian* the Palm of a glorious Death.'

Marcian issued, in the Month of *July*, another Edict against the *Eutychians*, whereby he subjects them to the Pains ordered against the *Apollinarists*, by the Canons, and by his Successors, forbidding them to create Bishops, Priests, and Clerks; to make Assemblies of Monks, and build Monasteries, to receive or bequeath any Thing by Testament, and to enter into the Army. He banishes particularly from the Empire, the Monks who inhabited at *Constantinople*, in the Monastery of *Eutyches*, which he will not call by that Name, because it has served for a Retreat to the Enemies of Religion. Towards the End of that Edict, he condemns all the Books written in Defence of the Heresy, to be burnt, and sends into Exile those who had composed them, or given to others to read, to corrupt their Faith; decrees Pain of Death against those who will have the Temerity to teach it, and adjudges ten Pounds of Gold, for Fines, against those who could be found assembled to hear it.

This Zeal of *Marcian*, for the orthodox Faith, against the *Eutychians*, could not hinder their Heresy from making a very great Progress in the East, where it divided itself afterwards into several Branches; *Nicephorus* makes mention of no fewer than twelve: Some called *Kematici*, or *Apparentes*, as only attributing to *Jesus Christ*, a Phantom, or Appearance of Flesh, and no real Flesh: Others *Theodosians*, from the Monk *Theodosius* abovementioned: Others *Jacobites*, from one *James* of *Syria*, which Branch established itself principally in *Armenia*, where it still subsists: And others *Acephsili*, that is to say, without Head; and *Severians*, from a Monk called *Severus*, who seized on the See of *Antioch*, in 513. These last were subdivided into five Factions, viz. *Agnostæ*, who attributed some Ignorance to *Jesus Christ*: The Followers of *Paul*: *Μελανιτæ*, that is, the black Angelites, thus called from the Place where they were assembled: Lastly, *Adrites*, and *Conovites*.

EXCISE.

EXCISE, is a Duty or Imposition, charg'd on Beer, Ale, Cyder, and other Liquors made for Sale, within the Kingdom of *England*, *Wales*, and Town of *Berwick upon Tweed*.

Note, That tho' *Excise* be neither an Art nor Science (but a certain Craft, which has its particular Rules for the Practice, not always founded on Equity, and the distributive Justice, nor attended with Humanity and Compassion) I will take Notice of it

in this Place, as of a Thing which touches very near the Publick; and under this same Head I'll treat of the different Duties on Merchandizes, exported and imported into the Kingdom, which I had forgot in my Treatise of Commerce.

Excise is a necessary Evil, tolerated in all Countries, and under all Sorts of Governments, but more particularly under a despotick one, where that Burthen falls heavier on the Subjects, than under an aristocratical, or democratical one; though this Rule is not so very general as to be entirely without Exception, as we'll see by and by; for as the Will of a despotick Prince, or rather that of his Ministers, is but too often the principal Law of the State, and their voracious Appetite for Money is never to be satiated; there are continually new Schemes formed, either to increase the *Excise*, or to invent new ones, against which the Subjects very justly complain, though but too often in vain; for those publick Oppressors, who are continually besieging the Throne, either hinder these Clamours of the Subjects against them, from reaching it; or if by Accident they should reach it, they represent to the Prince those Clamours as unjust, and as proceeding from the natural Inquietude of the Subjects, who can never be easy even under the most mild and happy Government, and murmur against all Sorts of Impositions whatever, even the less burthensome, and those which are indispensably necessary, to support the Glory of the Throne, and supply the Wants of the State, in the greatest Emergency, that those Impositions they so loudly complain of, are but Trifles, if compared to their Habit, since they could very well pay larger Sums, without incommoding themselves.

A Prince, let him ever be so well inclined to ease his Subjects of part of their Burthen, thus unjustly prejudiced against his Subjects, shews himself deaf to their Complaints, or rejects them with Scorn; and the Subjects, instead of being eased, pay dearly for it, by a further Increase of Impositions, which are always raised with a greater Severity on those who are less in a Condition to pay them. For those in better Circumstances keep an *Exciseman* in Awe, either through Fear of being called to an Account, if he was to exceed his Commission, or behave otherwise than he ought to do, or in hope of some Reward if he acts with Complaisance, or overlooks certain Things; but as he hath nothing to fear, and very little to hope from Persons in mean Circumstances, he lays almost the whole Burthen on them, and often makes them pay for the Favours shewn to the Rich. With the Poor he remembers all the Duties of an *Exciseman*: The King must have his Right, and was he to have the least Regard to their Indigency, he would run the Risque of losing his Place. With the Rich, he forgets all those Duties; he is what they please, waits as long as they please, is blind if they please, and reckons what they please. With the one he is a Person of Importance, and must be treated as such; and with the other he is nothing at all, and thinks himself pretty well off, if he is suffered among the menial Servants; and very much honoured if the Master takes any Notice of him, or favours him with a Nod.

Impositions on the Subjects are certainly indispensably necessary, since in several Countries they make the most considerable Parts of the Revenue of the Crown, and defrauding a Prince of the Duties upon Commodities (when confined within just Limits) is a Theft, and as criminal before God, as robbing another Person of his Properties. But there is *Modus in rebus*, and these Impositions must be directed by Justice, otherwise, they are nothing else in Reality, but a mere Plunder on the Subjects, which they are authorized by the natural and divine Laws, to oppose, by Means agreeable to the Respect they owe to their Sovereign, who must have renounced all the Principles of Honour, Generosity, Humanity and Compassion, if he refuses to hear the just Complaints of his

Subjects on such an Occasion, and to redress their Grievances, by taking off part of those Impositions, and punishing severely those who have been instrumental to them.

What often makes the *Excise*, and other Impositions of that Nature, fall so heavy on the Subjects, is the vast Number of Persons employed in raising and gathering those Taxes and Impositions; for every one of them must have his Share, some more, some less. Thus the great Frauds, committed in that Branch of a Prince's Revenue, are the Cause, that he has but the least Share of it; for by a reasonable Supputation, we have found in *France* (and perhaps the same could be found in *England* in Proportion) that of twenty Millions raised in that Manner, there were not six carried to the King's Coffers. It is true, that the King has always the Sum which was designed for him at first; but as those Sorts of Impositions are put to Auction, and adjudged to the best Bidders, who are distinguished by the Title of *Fermiers Generaux*, i. e. General Farmers; those general Farmers under-farmed them to others, at an immense Profit (as well to make themselves whole of what they have been obliged to give to a Minister or Favourite, to obtain the Preference, as to make an immense Fortune) those Underfarmers must raise the Sum proposed in the first Instant, together with the Surplus they have paid, or are to pay the General Farmers, for their Commission, and also make besides their Fortune. The Commissioners appointed in the several Districts by the Underfarmers to raise those Impositions, must also have their Part of the Cake, besides their Appointments; the *Commis* of those Commissioners are not behind-hand with their Masters; the *Exciseman*, or *Maltotiers*, plunder likewise as much as they can; and this is the Manner the Substance of the Subjects is lavished among Plunderers, Thieves, and Ruffians, born for the Destruction of a whole Country, and the Scandal of the Throne; for though all the while the Prince be innocent, he is notwithstanding reproached with it.

I must confess, that it is very difficult to avoid those great Evils; but however, it is not absolutely impossible: For a Prince should appoint Persons of Birth, Merit and Fortune, of an approved Integrity, and not at all interested in those Farms, to follow narrowly all the Steps taken by those appointed to raise and gather those Impositions; with the full Power to limit the Number of those Leeches; to keep an exact Account of the Sums rising in a Province, and to dismiss and punish severely, by Confiscation of Estate or otherwise, all those they could find guilty of Malversation; besides the Confiscation of their Estates, to the easing the Subject afterwards, as far as those Estates can go; the last Supplice is not too much for a Farmer, or Commissioner of Excise, &c. who plunder the Subjects in the Execution of his Office. Why should twenty Persons, for Example, be employ'd in an Office, which can be discharg'd by ten; or perhaps less? For it must be reasonably supposed, that the greater is the Number of Officers, the greater must be the Sum which is to be raised; if it was but to pay their Salaries; and the more the People must be burthened.

The Employment of an *Exciseman* is no otherwise dishonourable, than he renders it so himself by his Malversations, and irregular, and sometimes very barbarous Conduct, in the Discharge of it; for when they do their Duty as they ought, without Partiality, i. e. with doing Justice both to the Prince their Master, and to his Subjects; by not suffering the one to be defrauded of his Revenue, nor oppressing the others; they are to be consider'd as the Rent Gatherers of the Prince; or his Stewards, and treated as such; and a Punishment inflicted on those who should treat them otherwise, on the single frivolous Pretence that they are *Excisemen*.

The Duty of *Excise*, in *England*, was first granted to King *Charles II.* by Act of Parliament, in the Year 1660; during the Life of that Prince: It has been since

since continued and augmented by divers Parliaments, under the several succeeding Princes, and extended to Scotland. This Duty, as it now stands, on strong Beer and Ale, is at the Rate of 4s. 9d. *per* Barrel; and upon Small Beer 1s. 6d. Now Brewers being allow'd for Leakage of Beer 3 Barrels in 23; and of Ale, 2 in 22; the neat *Excise* of a Barrel of Strong Beer, amounts to 4s. 1d. $\frac{2}{3}$; of a Barrel of Ale, 4s. 3d. 3q; and of a Barrel of Small Beer, 1s. 1d. 1q. $\frac{1}{3}$.

The *Excise* is one of the most considerable Branches of the King's Revenue. It was formerly farmed out; but is now managed for the King by seven Commissioners, who sit in the *General Excise-Office*, receive the whole Product of the *Excise* of Beer, Ale, and other Liquors, and Malt, collected all over England, and pay it into the Exchequer. Their Salary is 800*l.* *per Annum* each; and they are obliged, by Oath, to take no Fee or Reward, but from the King only. From the Commissioners of *Excise* there is an Appeal to five others, call'd *Commissioners of Appeal*.

The Number of Officers employ'd in this Branch of the Revenue is very great. Besides the Commissioners abovemention'd, and their subordinate Officers, as Registers, Messengers, &c. there is an Auditor of the *Excise*, with his Clerks, &c. a Comptroller with his Clerks; a Register, Secretary, Solicitor, Cashier, Teller, Clerk of Securities, Housekeeper, Door-keeper, an Accomptant for the Imprest Money, general Gauger, general Accomptants, with their Assistants; a Clerk for Stationary Wares, Examiners, &c. for the London Distillery, Vinegar, Cyder, &c. Also Examiners for Malt; general and other Surveyors of the London Brewery; with Assistants, and other Officers, to the Number of an Hundred. General and other Surveyors of the London Distillery, with other Officers, to the Number of Forty; a Collector, and Surveyor of imported Liquors; with a Land Surveyor at the Custom-house, &c.

The yearly Salaries of all the Officers in the *Excise* Office, as computed by Mr. Chamberlayne, amount to 23,650*l.* Beside which, there are in the Country fifty Collectors, and one Hundred and fifty Supervisors; with a great Number of inferior Officers, call'd *Gaugers* and *Excisemen*; which may make the Number of Persons employ'd in the Revenue about two Thousand.

The *Excise* on Beer, Ale, and other exciseable Liquors, even during a Time of War, is computed to amount to 1,100,000*l.* *per Annum*; and is collected from above 300,000 People.

The Duty on Malt, with the additional Duty on Cyder, &c. amounts to betwixt 6 and 700,000*l.* *per Annum*; and is collected from more Hands than the former. And yet the whole Charge of managing all these Duties does not amount to 20d. *per* Pound; which, considering every Thing, is esteem'd an Exactness and Frugality, not to be parallel'd in any Revenue, levied in this or any other Country.

The Rates, with the neat Produce of several Impositions of *Excise*, are as follow:

1. A Duty of 2s. 6d. <i>per</i> Barrel, whereof 15d. <i>per</i> Barrel during his Majesty's Life, and the other 15d. Hereditary; appropriated to the Civil Government, after a Deduction of 3700 <i>l.</i> <i>per</i> Week for Annuities. — Neat Produce	269,837
2. A Duty of 9d. <i>per</i> Barrel, granted 4 Will. and Mary, for 99 Years, commencing January 1692; charged with 124,866 <i>l.</i> <i>per Annum</i> for Annuities, and 7567 <i>l.</i> <i>per Anm.</i> on Survivorship. — Neat Produce	150,106
3. Another 9d. <i>per</i> Barrel, perpetual, 5 Will. and M. for Payment of 100,000 <i>l.</i> <i>per Anm.</i> to the Bank, as also several Annuities on Lives. — Neat Produce	150,094

4. Another 9d. *per* Barrel, for 16 Years, continued 4 Ann. from May 1713, for 95 Years, for paying 140,000*l.* *per Ann.* on Million Lottery Tickets; with Annuities of 99 Years. — Neat Produce 159,898*l.* — Which with some additional Duties, granted in a later Act, may amount to

5. A Duty on Low Wines, and Spirits of the first Extraction, continu'd to the 24th of June 1710. — Neat Produce 25,267

6. The *Excise* on Ale and Beer in Scotland, is farmed at 33,500

Total — 1,100,610*l.*

From *Excise* we'll pass to *Customs*, which are the Dues, Duties, or Tolls, paid by Merchants to the King, or other Sovereign Prince, for carrying out, and bringing in of Merchandizes.

The *Customs* of Goods exported and imported throughout England, amount yearly to 1,300,000*l.* whereof those of the Port of London make a third Part.

The *Customs* in England are very numerous and very high, perhaps beyond what any other trading Nation knows: — The Principals are Duties of *Tunnage* and *Poundage*, which are very antient, being the only one in Use before the Time of King Charles II. but that Prince and his Successors have introduced divers others: At present the Customs on Liquors, are *Tunnage*, the additional Duty, the Duty of *Excise*, *Coinage*; Duty of the *Old Imposition*, Duty of the *Additional Imposition*; Duty of *Orphan's Money*, Duty on *French Wines*, *New Subsidy*, $\frac{1}{2}$ and $\frac{2}{3}$ Subsidies.

The Duty of *Tunnage*, or the *Old Subsidy*, was established in the 12th Year of Charles II. it was at first only granted him for Life; but afterwards continued in the first Year of King James II. during the Life likewise of that Prince. And lastly, by several Acts in the Reign of Queen Anne, it was again continued for 96 Years, ending in the Year 1808.

This first Duty of *Tunnage*, is 4*l.* 10*s.* *Sterling per* Tun, on all *French Wines* brought by *English* Vessels into the Port of London, and only 3*l.* into the rest. — The same Wine brought by foreign Vessels into the Port of London, pays 6*l.* and into the other Ports 4*l.* 10*s.* *Sterling*. — *French* Vinegar made of Wine, pays 4*l.* 10*s.* brought by *English* Vessels; and 6*l.* by foreign. — *French* Cyder and Perry, and Vinegar made of those Liquors, pay as in the preceding Article.

Rhenish Wine, brought into any Port of England, pays 1*l.* *Sterling per* Awine; a Measure amounting to the sixth of a Tun, so that the Duty *per* Tun is about 7*l.* 7*s.* which is a fourth more than that of *French* Wine. *Spanish* and *Portugal* Wines, *Muscadines*, *Malmseys*, and other *Greek* Wines, pay the same as *French* Wines; and the like is to be understood of *Vinegars* made thereof.

The *Additional Duty of the Old Subsidy*, or *Old Tunnage*, was made in 1660, and continued like the Subsidy itself to 1708. — For this Duty, *French* Wine pays 3*l.* *Sterling per* Tun. *Rhenish* Wines pay as *French* Wines. *Spanish* Wines pay 4*l.* *Portugal* Wines 3*l.* *Muscadines*, *Malmseys*, and other *Greek* Wines, pay the same as the *Spanish* Wines. Vinegar, Cyder, and Perry, are exempt from this Duty.

Duty of *Old Imposition*, was established in the Year 1685, and continued by divers Acts; that of 1711 made it perpetual. — By this Duty, *French* Wines pay 8*l.* *Sterling per* Tun, in all the Ports of England; *Spanish*, *Portugal*, *Muscadine*, and other *Greek* Wines 12*l.* Vinegar 8*l.*

The Duty of additional Imposition was established in 1690, continued by divers Acts to 1702, and in 1712 made perpetual. This Duty none but the *French* pay, the other Nations being exempt from it. Each Ton of *French* Wine pays for this Duty 8*l.* *Sterling* in any Port of England: Vinegar, Cyder, and Perry

Perry pay 25 *per Cent* of their Value.

Additional Duty on *French Wines*, is one of the Duties to which *French Wines* alone are subject: It was established in the Year 1695, for 20 Years, and since continued.—It is rated at 25 *l.* Sterling *per Tun*; and Vinegar at 15 *l.*

The *Duty*, called *New Subsidy*, was granted to King *William III.* in 1695 for his Life, and since continued to Queen *Anne* for her Life. This is properly a Duplicate of the *Duty* of Tunnage, to which *French* and other Wines are equally subject, whether brought in *English* or foreign Vessels; though there are some Differences as to Vinegars, Cyders, and Perry.

The *Orphan's Duty* is only charged on Wines brought into the Port of *London*; its Name expresses the pious Office it was intended for.—It had its Rise in the 6th Year of King *William III.* is fixed at 4*s.* *per Tun*, on all Wines indifferently.

The *Duty* on *Hungary Wines* is very late, only established in the first Year of Queen *Anne*; and is the same with that paid by *Rhenish Wines*.

The *Duty*, called *Third Subsidy*, is a Third of the old Subsidy, first established in 1703, and since continued by divers Acts, to expire in 1805.

The *Duty*, called *two Thirds Subsidy*, is likewise a new *Duty* first established in 1704, to last only for a certain Time, though since made perpetual.—It consists in two other Thirds of the old Subsidy, so that these two Duties of 1703 and 1704, are equal to the old Subsidy.

Besides these *Duties* imposed on all Wines imported, both by Natives and Foreigners; there are likewise the *Duty* of *Butlerage*, another *Duty* called *Alien's*, another of *Bristol*, and another of *Southampton*, mounting together to about 40*s.* *per Tun*: But as these *Duties* are only levied on Wines imported in foreign Vessels, it is but rarely they are paid; most of the Wine-Trade being managed by *English* Vessels.

From this State of the *Duties* paid by Wines and other Liquors brought into *England*, it appears that *French Wine* imported by *Englishmen* into the Port of *London*, pays 55*l.* 16*s.* 8*d.* Sterling *per Tun*. Those imported by the same into the other Ports, 51*l.* 13*s.* 6*d.* Those brought by Foreigners into the Port of *London*, 61*l.* 15*s.* 10*d.* and into the other Ports 57*l.* 12*s.* 8*d.*

Spanish, Italian, Muscadine, Malmsey, and other *Greek Wines*, imported by the *English* into the Port of *London*, pay 27*l.* 7*s.* 10*d.* Sterling; and brought by the same into the other Ports, 23*l.* 14*s.* 9*d.* The same Wines, brought to *London* by Foreigners, pay 33*l.* 7*s.* three fourths.

Portugal, Rhenish, and *Hungary Wines*, brought to *London* in *English* Vessels, pay 26*l.* 10*s.* 3*d.* into the other Ports, 22*l.* 7*s.* 2*d.* The same Wines, imported to *London* by Foreigners, pay 32*l.* 9*s.* 5*d.* and into other Ports, 28*l.* 6*s.* 3*d.*

French Vinegars, imported to *London* by the *English*, pay 27*l.* 10*s.* 11*d.* and into the other Ports, 26*l.* 4*s.* 6*d.* The same Vinegars, imported to *London* by foreign Vessels, pay 28*l.* 17*s.* 3*d.* and in the other Ports, 27*l.* 10*s.* 11*d.*

Spanish and *Portugal Vinegars*, imported to *London* by *English* Vessels, pay 12*l.* 10*s.* 11*d.* in the other Ports, 11*l.* 4*s.* 6*d.* The same Vinegars, imported to *London* by foreign Vessels, pay 13*l.* 17*s.* 3*d.* and in the other Ports, 12*l.* 10*s.* 11*d.*—As to Cyders and Perries, the Importation is not considerable.

French Brandies, imported by any Vessel into any Port, pay 78*l.* 4*s.* Sterling *per Tun*; and Brandies from any other Country, except *France*, only 48*l.* 4*s.* All other foreign Brandies being exempted from Duties of 30*l.* Sterling, charged on *French Brandy*, by Acts of Parliament under the Reign of K. *William III.*

Note, That the *English* Merchants are not oblig'd to pay these several Duties before Twelve Months; nor Foreigners before Nine; giving Security for the same. Or if they pay ready Money, there is a De-

duction made them of 5 *per Cent.* on the old new Third, and two Thirds Subsidies, and on the other Duties 6 $\frac{1}{4}$ *per Cent.* Add, that if those Merchandizes be again exported into other Countries, after they have been enter'd into *England*, the Duties are return'd; tho' this only within the Compass of a Year to Natives, and of Nine Months to Foreigners.

The *Duties* on other Commodities are the antient *Duty* of Poundage, the additional *Duty* of 1660, on Linnens and Silks: The new Imposition of Poundage, called the Impost of 1690: Another Imposition of four Fifths in 1693: The *Duty* of 25 *per Cent.* on *French Goods*, imposed in 1695: The new Subsidy of Poundage in 1697: Another additional Subsidy, of a Third of Poundage, in 1703: Another Third in 1704: A *Duty* on Fish, Oils, and Whale-fins, in 1709: Another on Leather, Vellum, and Parchment, in 1711: A second on the same Goods, in 1712: And lastly, in the same Year, a *Duty* on Paper, Paste-board, and Soap.

Note, That these Sorts of *Duties* are call'd Poundage, because fixed at the Rate of so much *per Pound*; viz. one Shilling in every Pound, or twenty Shillings; and for *English* Commodities exported by Aliens, one Shilling more. It was first granted to *Edward VI.* for Term of his Life; and afterwards to King *Charles II.* Anno 12 Car. II.

The Office established for the Receipt of the *Customs*, and *Duties* of Importation and Exportation, imposed on Merchandizes by the Authority of the Sovereign, and regulated by Tariffs, or Books of Rate, is call'd *Custom-House*.

There are several *Custom-Houses* in the several Ports of *England*: The most considerable is that of *London*; which is under the Direction of seven Commissioners, appointed by Patent; who have the Charge and Management of all the Customs (the petty Farms alone excepted) in all the Ports of *England*.—The other Officers are, a Secretary, Solicitor, Receiver-General, Comptroller of the Issues and Payments of the Receiver-General, Comptroller-General, Inspector of the Out-Ports, Collectors of Accompts, Inspector-General of the Exports and Imports, Register-General of all Ships of *Great Britain*, Surveyor-General, Surveyor of Out-Ports, Register of the Seizures, &c. all holding their Places by Patents; with other inferior Officers, appointed by Warrant from the Board of Treasury.

In *Spain*, the *Duties* of Export and Import are call'd *Duties* of *Alcavala*, and amount to above 5 *per Cent.* of the Value of the Goods: For Instance, a Piece of Velvet, of 40 *Spanish* Vares, or Yards, pays 20 Rials; Hats of *Vigonia*, 5 Rials apiece; Linnens, 224 Rials *per* 100 Vares; Gold and Silver Laces, 2 $\frac{1}{4}$ Rials, the Mark Weight: The *Duties* of Exportation are nearly on the same Footing.

In *Portugal*, the *Duties* of Importation were antiently the same on all Kinds of Goods; viz. 18 *per Cent.* For Exportation, the *Duties* are only 6 *per Cent.*

In *Holland*, the *Duties* of Exportation and Importation are nearly alike; both of them being about the Rate of 5 *per Cent.* of the Value of the Goods. At *Hambourg* and *Bremen*, the *Duties* are but 1 *per Cent.* At *Lubeck*, $\frac{1}{3}$ *per Cent.* In *Muscovy*, 5 *per Cent.*

At *Venice* these *Duties* are 6 $\frac{1}{4}$ *per Cent.* for what the Natives import; and 10 $\frac{1}{2}$ to Strangers: The *Duties* of Exportation are 9 *per Cent.*—At *Leghorn*, the *Duties* of Exportation and Importation are very inconsiderable; but with the Addition of a Number of petty Dues, becomes as great as at *Venice*.

In the Ports of the *Levant*, *Constantinople*, *Smyrna*, *Aleppo*, &c. the *Duties* of Exportation and Importation are nearly on an equal Footing, viz. 3 *per Cent.* except to the *Venetians* and *Jeros*, who pay 5 *per Cent.*—The Consuls Duties are likewise to be added for *Smyrna*, &c. which are about 2 *per Cent.*

At

At *Cairo, Alexandria*, and some other Cities of *Egypt*, the *Duties* are of two Kinds; one for Goods brought in Ships from *Europe*, the other for those brought by the Caravans from *Asia*. The first are fix'd at 20 *per Cent*. The second are arbitrary, but always very high. Besides the ordinary *Duty*, they

here pay the golden *Duty*, which is the tenth Part of what is paid for the first *Duty*. As to *Duties* of Exportation, they may be said to pay none, the one and a half *per Cent*, being rather a Custom-House Fee, than any *Duty* paid the Sovereign.

FALCONRY.

FALCONRY, or *Fauconry*, (of *Falco*, Falcon, or Faucon, the Bird of most Use and Esteem in this Kind of Sport) is the Art of Taming, Managing, and Tutoring Birds of Prey, particularly Falcons and Hawks; and employing them with Advantage, in the Pursuit of Game. This Art is also called Hawking.

Though this Exercise of *Falconing*, or Hawking, be now very much difused in *England*, in Comparison of what it antiently was, we, notwithstanding, must not abstain from giving some particular Directions for it, beginning by the Birds employ'd in this Kind of Sport, and instructing our Sportsman how to chuse them.

The Hawk-Kind, makes the Subject of the Art of *Falconry*, and tho' Naturalists disagree about the Number and Division of these Birds, it must, however, be observed, that the most commodious Distribution, is into long-wing'd, and short-wing'd Hawks.

To the long-wing'd Hawks, called also of the Falcon Tribe, belong the Falcon, Haggard Falcon, Ger-Falcon, Lanner, Hobby, Saker, Merlin, and Bawler; all which are reclaim'd, mann'd, fed, and mew'd much after the same Manner. Of the short-wing'd Species, or Hawks, properly so called, are the Goshawks, and Sparrow-Hawks.

The former are generally brought to the *Lure*, and seize their Prey with their Foot, breaking their Neck-Bone with their Beak, e'er they proceed to plume, or tear it. The latter are brought to the *Fist*, and kill their Game by Strength, and Force of Wing, at Random, and proceed immediately to plume them.

Note, That Hawk, *Accipiter*, is a Bird of Prey, of a bold and generous Nature. That the Female of all Birds of Prey, is much larger, stronger, and more courageous, than the Male; which is distinguished therefrom by some diminutive Name. Those of the Falcon, and Goshawk, are called *Tiercels*, or *Tiercelets*; that of the Ger-Falcon, *Jerkin*; that of the Merlin, *Jack*; that of the Hobby, *Robin*; that of the Sparrow-Hawk, *Musket*; and that of the Lanner, *Lanneret*. Hawks have also different Names, according to their different Ages, and the different Seasons when they are taken. According to their different Ages, the first Year she is called a *Soarage*; the second, an *Interview*; the third, a *white Hawk*; the fourth, a Hawk of the *first Coat*. According to the different Seasons, those taken in the *Ayrie*, are called *Eyesses*, or *Nyesses*; those which had forsaken it, and were fed in some Place, not far off, by the old Ones, *Branchers*; those which had begun to prey for themselves, *Soar-Hawks*; those which have changed their Feathers, once or more, *mew'd Hawks*; and those which liv'd at large, and prey'd for themselves about the Woods, *Haggards*.

Note, Also, that every Part of a Hawk, of any of these Denominations, has also its particular Name. The Legs, from the Thigh to the Foot, are called *Arms*; the Toes, *Petty-fingles*; the Claws, *Pounces*; the Wings are called *Sails*; the long Feathers thereof, *Beams*; the two longest, *principal Feathers*; those next thereto, *Flags*; the Tail is called *Train*; the Breast-Feathers, *Mails*; those behind the Thigh, *pendant Feathers*. When the Feathers are not yet full grown, she is said to be *unsummed*;

when they are compleat, she is *summed*; the *Crow*, or *Crop*, is called *Gorge*; the Pipe next the Fundament, where the *Fæces* are drawn down, is called *Pannel*; the slimy Substance in the *Pannel*, is called *Glut*; the upper and crooked Part of the Bill, is called *Beak*; the nether Parts, *Clap*; the yellow Part between the Beak and the Eyes, *Sear*, or *Sere*; the two small Holes therein, *Nares*.

From this we'll pass to inform our Pupil-Sportsman, of what relates to the several Species of Hawks, beginning by the *Falcon*, or *Falcon-gentle*.

The *FALCON*, or *Faucon*, is a Bird of Prey of the Hawk-Kind, superior to all others for Courage, Docility, Gentleness, and Nobleness of Nature. The *Falcon*, is both for the *Fist* and the *Lure*, having yellow Feet, his Head black, and a spotted Beak. The best is that whose Head is round, the Beak thick and short, the Neck long, the Shoulders broad, long Thighs, short Legs, large Feet, the Feathers of the Wings slender, the Pounces black, &c.

The *Falcon* is excellent at the River, Brook, and even in the Field, and flies chiefly at the largest Game, as Wild-Goose, Kite, Crow, Heron, Crane, Pye, Shoveller, &c.

The *Haggard Falcon*, called here, also, *Peregrine Falcon*, *Passenger*, and *Traveller*, because no Native of this Land; or rather, by Reason of its roving and wandering more than any other Sort, is not inferior to the best of the Tribe, for Strength, Courage, Hardiness, and Perseverance. She is distinguished from the common *Falcon*, as being larger, longer arm'd, with a longer Beak and Talons, a higher Neck, &c. She will lie longer on the Wing, and is more deliberate, and advised in her stooping, &c. This Bird when wild and unreclaimed, takes the greatest Liberty of all Birds, living either by Land or Sea; and is of such absolute Power, that wherever she comes, all flying Fowl stoop under her Subjection; even the *Tiercelet*, tho' her natural Companion, dares not sit by her, or approach her Residence, except in cawking Time; when, for Procreation Sake, she admits him, in a submissive Manner, to come near and woo her. When very young, she is apt to attack Birds too strong for her; which she persists in, till a sound Beating has brought her to a better Understanding. She is an incessant Pains-taker, no Weather discouraging her from her Game. When unreclaimed she has seized her Prey, and broke the Ink or Neck, she falls on the Crop, and feeds first on what is contained there, then on the other Parts. When she has filled her Gorge, she flies to some solitary Place, near the Water, where she sits all Day, and at Night takes Wing to some convenient Place, where she had before purposed to perch till Morning.

The *Ger-Falcon*, or *Gyr-Falcon*, is the largest Bird of the Falcon-Kind, coming next the Size of a Vulture; and of the greatest Strength next an Eagle. She is stoutly arm'd, and in all Respects a lovely Bird to the Eye. Her Head and Eyes are like the Haggard; her Beak great and bending, her Nares large; her Sails long and sharp-pointed, and her Train and Mail much like the Lanners, having a large marbled-scar'd Foot, and plum'd Black, Brown, and Russet. She may also be called a *Passenger*, her *Ayrie* being in *Prussia*, *Muscovy*, and the Mountains of *Norway*. She is of a fierce and fiery Nature, very hardly managed and reclaimed; but being once overcome, proves

an excellent Hawk, scarce refusing to strike at any Thing. She does not naturally fly to the River, but always pursues the Herons, Shovelers, &c. In going up to their Game, they do not hold the Course or Way, which others use to do, but climb up upon the Train; when they find any Fowl, as soon as they have reached her, they pluck her down, if not at the first, yet at the second or third Encounter.

The *Saker*, or *Saſſe*, is the third in Esteem next the Falcon, and Ger-Falcon, but difficult to be managed, being a Passenger, or Peregrine Hawk, whose *Ayrie* has not yet been discover'd, but chiefly found in the Islands of the *Levant*; she is somewhat longer than the Haggard Falcon; her Plume rusty and ragged; the Sear of her Foot and Beak like the Lanner; her Pounces short, and her Train the longest of all Birds of Prey; she is very strong and hardy to all Kind of Fowl, being a great deal more disposed to the Field, than the Brook, and delighting to prey on great Fowl, as the Heron, Goose, &c. but for the Crane she is not so free as the Haggard Falcon; she also excels for the lesser Fowl, as Pheasants, Partridges, &c. and is much less dainty in her Diet, as long-wing'd Hawks usually are. The *Saker* makes excellent Sport with a Kite, who, as soon as she sees the *Saker* cast off, immediately betakes himself to, and trusts in the Goodness of his Wings, and gets to his Pitch, as high as possibly he can, by making many Tours and Wrenches in the Air, which together with the Variety of Conteſts and Bickerings between them, affords a curious Sport.

The *Lanner*, or *Lanar*, is a Hawk common in most Countries, especially in *France*; making her *Ayrie* on lofty Trees in Forests, or on high Cliffs near the Seaside. She is less than the Falcon, gentle, fair-plum'd, and has shorter Talons than any other Falcon. Such as have the largest and best-season'd Heads are esteemed the best. Mew'd *Lanners* are not easily known from Goshawks, or Sakers; the chief Marks are, that they are blacker, have less Beaks, and are less arm'd and pounced than any other Hawks, of the whole Hawk Tribe. There is none so fit for a young Falconer as this, because she is not inclined to Surfeits, and seldom melts Grease by being over-flown. There is another Sort of *Lanners*, whose *Ayrie* is in the *Alps*, having their Heads white, and flat aloft, large and black Eyes, slender Nares, short and thick Beaks; being less than the Haggards, and Falcon-gentle, tho' there are different Sizes of them: Their Tail marbled and russet; Breast-Feathers white and full of russet Spots, and the Points and Extremities of their Feathers full of white Drops; their Sails and Trains long, short-legg'd, with a Foot less than that of a Falcon, marble-scar'd. This Hawk never lies upon the Wing, after she has flown to a Mark; but after once stooping, makes a Point, and like the Goshawk waits the Fowl. She is more valued abroad than in *England*; the *English* Falconers looking on her as slothful, and hard-mettled. The Truth is, a very strict Hand must be kept over her, as being of an ungrateful Disposition. She is flown at Field or Brook, and will maintain long Flights, by which Means much Fowl is kill'd. To fly them they must be kept very sharp; and because they keep their Castings long, they must have hard Castings, made of Tow, and Knots of Hemp.

The *Merlin* is the smallest of all Birds of Prey, and bears a Resemblance to a Haggard-Falcon in Plume, as also in the Sear of the Foot, Beak, and Talons, and not unlike her in Conditions; when well mann'd, lur'd, and carefully look'd after, she proves an excellent Hawk; especially at Partridge, Thrush, and Lark: But she is very busy and unruly, and special Care must be had, lest she unnaturally eat off her own Feet and Talons, as she is often known to do. She is wondrous venturesome, and will fly at Birds bigger than herself, with such Eagerness, as to pursue them even into a Town or Village. Tho' the *Merlin* be accounted a Hawk of the Fist, she may be brought to take Delight in the Lure, so as she will patiently en-

dure the Hood; you should make her a Train with a Partridge, if she foots and kills her, reward her well; then fly her at the wild Partridge, and if she takes or makes it, at first or second Flight, being retrieved by the Spaniels, feed her upon it with a reasonable Gorge, cheering her in such Manner with the Voice, that she may know it another Time: If she does not prove hardy at the first or second Time, she will be good for nothing.

The *Hobby* is a Sort of Hawk, that naturally creeps on Doves, Larks, and other small Game. She has a blue Beak, but the Sear thereof, and Legs, are yellow; the Crinels, or little Feathers under the Eye, very black; the Top of the Head between black and yellow; she has also two white Seams on her Neck: The Plumes under the Gorge, and about the Brows, are reddish, without Spot or Drop; the Breast-Feathers for the most Part brown, yet interspersed with white Spots; her Back, Train, and Wings, are black aloft, having no great Scales upon the Legs, unless a few behind: The three Stretchers and Pounces, are very large, with Respect to her short Legs; her Brail Feathers are tinged between red and black, the pendant ones, or those behind the Thighs, of a rusty, smoaky Hue. She is a Hawk of the Lure, and not of the Fist, and is an high flyer, being in every Respect like the *Saker*, but she is of a much less Size; for she is not only nimble and light of Wing, but dares encounter Kites, Buzzards, or Crows, and will give Blow for Blow, till sometimes they siege, and come tumbling down to the Ground both together. But she is chiefly for the Lark, which poor little Creature, does so dread the Sight of her, soaring in the Air over her, that she will rather chuse to commit herself to the Mercy of Men, or Dogs, or to be trampled on by Horses, than venture into the Element, when she sees her mortal Enemy soaring there. The *Hobby*, also, makes excellent Sport with Nets and Spaniels, for when the Dogs range the Fields to spring the Fowl, and the *Hobby* soars aloft over them, the poor Birds, apprehensive of a Conspiracy between the Hawks and Dogs to their utter Ruin, dare not commit themselves to their Wings, but think it safer to be close on the Ground, and so are taken in the Nets. This Sport is called *Daring*.

The *Goshawk*, or *Goss-hawk*, q. d. *Grofs-hawk*, is a large short-wing'd Hawk, of which there are several Sorts differing in Goodness, Force, and Hardiness, according to the Diversity of their Choice in cawking; at which Time, the several Sorts of Birds of Prey assemble themselves with the *Goshawk*, and gallant it together. There are *Goshawks* from most Countries, but none better than those bred in the North of *Ireland*. She ought to have a small Head, a long and strait Face, a large Throat, great Eyes deep set; the Apple of the Eye black; Nares, Ears, Back, and Feet, large and black; a black long Beak, long Neck, big Breast, hard Flesh, long fleshy Thighs, the Bone of the Leg and Knee short, long, large Pounces and Talons; and to grow round from the Stern, or Train, to the Breast forward. The Feathers of the Thighs towards the Train, should be large, and the Train Feathers short and soft, somewhat tending to an Iron Mail. The Brail Feathers ought to be like those of the Breast; and the Covert Feathers of the Train, spotted and full of black Rundles, but the Extremity of every Train Feather, black streaked. To distinguish the Strength of the Bird, tie divers of them in several Places of one Chamber, or Mew; and that Hawk that flies and mutes highest, and farthest off, may be concluded to be strongest. The *Goshawk* flies at the Pheasant, Mallard, Wild-Goose, Hare, and Coney, nay she will venture to seize a Kid or Goat. She is to be kept with Care, as being very Choice and Dainty in Eating, &c.

The *Sparrow-Hawk*, is also a Kind of short-wing'd Hawk, whereof there are several Sorts, different in Plumes: Some small plum'd and black, others of a larger Feather; some plum'd like the Quail, some brown or Canvas-Mail, &c. The *Sparrow-Hawk*, so far

far as her Strength will give her Leave, is a good Hawk; and he that knows how to man, reclaim, and fly with a *Sparrow-Hawk*, may easily attain to the Keeping and Managing of all others. In this Respect, she really excels, that she serves both for Winter and Summer with great Pleasure, and will fly at all Kind of Game, more than the Falcon.

Having thus given a Description of all the Birds proper for the *Art of Falconry*, and of their different Qualities; we must proceed to the Explanation of the Terms proper for their several Actions, viz. *Bate*, *Crabbing*, *Cowring*, *Feak*, *Jack*, *Cawking*, *Mantling*, *Muting*, *Intermewing*, *Slice*, *Slime*, *Dropping*, *Sniting*, *Rouze*, *Warble*, *Bind*, *Plume*, *Trussing*, *Stooping*, *Rake*, *Check*, *Fly on Head*, *Quarry*, *Pelt*, *Canceliering*, *Ruff*, *Reclaiming*, *Manning*, *Make-Hawk*, &c.

When the Bird flutters with her Wings, as if striving to get away, either from Perch or Fist, she is said to *Bate*.

Crabbing, is when the Birds standing too near, they fight with each other.

Cowring, is when the young Ones quiver and shake their Wings in Obedience to the Elder.

To *Feak*, is when the Bird wipes her Beak after feeding.

To *Jack*, is when she sleeps.

Intermewing, is the Interval between exchanging her Coat, and turning white again.

Treading, is called *Cawking*.

Mantling, is when she stretches one of her Wings after her Legs, and then the other.

Her Dung is called *Muting*; when she mutes a good Way from her, she is said to *Slice*; when she does it directly down instead of yerking backwards, she is said to *Slime*; and if it be in Drops, it is called *Dropping*; when she, as it were, sneezes, it is called *Sniting*.

To *Rouze*, is when she raises and shakes herself.

To *Warble*, is when after Mantling, she crosses her Wings together over her Back.

To *Bind*, is when she scares.

To *Plume*, is when after seizing she pulls off the Feathers.

Trussing, is when she raises a Fowl aloft, and at length descends with it to the Ground.

Stooping, is when being aloft, she descends to seize her Prey.

To *Rake*, is when she flies out too far from the Game.

To *Check*, is when forsaking her proper Game, she flies at Pycs, Crows, &c. that chance to cross her.

To *Fly on Head*, is when missing the Fowl, she betakes herself to the next Check.

The *Quarry*, is the Fowl or Game she flies at.

The *Pelt*, is the dead Body of the Fowl kill'd by the Hawk.

To *Carry*, is when she flies away with the Quarry.

Canceliering, is when in stooping she turns two or three Times on the Wing, to recover herself e'er she seizes.

Ruff, is when she seizes the Prey, yet does not truss it.

Reclaiming, is the making a Hawk tame and gentle.

Manning, is the bringing her to endure Company.

A *Make-Hawk*, is an old stanch one, used to fly and set Example to a young one.

Besides the above-mention'd Terms, there are also several others proper to the *Art of Falconry*, viz. *Casting*, *Plumage*, *Rangle*, *Gleaming*, *Enseaming*, *Gurgiting*, *Imping*, *Tiring*, *Ink*, *Pill*, or *Pelf*.

Casting, is something given a Hawk, to cleanse and purge her Gorge.

Plumage, are small Feathers given to make her Cast.

Rangle, is Gravel given her to help bring down her Stomach.

Gleaming, is her throwing up Filth from the Gorge after Casting.

Enseaming, is the Purging of her Grease, &c.

A being stuff'd, is called *Gurgiting*.

Imping, is the inserting a Feather in her Wing, in lieu of a broken one.

Tiring, is the giving her a Leg, Wing, or Pinion of a Fowl to pull at.

The *Ink*, is the Neck of a Bird the Hawk preys on.

The *Pill*, or *Pelf*, is what the Hawk leaves of her Prey.

The Terms proper for her Furniture (for the Lady must be lodg'd and dress'd) are the *Bewits*, *Lease*, or *Leath*, *Jesses*, *Creance*, *Hood*, *Rafter Hood*, *Striking the Hood*, *Seeling*, *Lure*, *Pearch*, *Hack*, *Mew*, &c.

Bewits, are the Leathers, with Bells button'd on her Legs.

The *Lease*, or *Leath*, is the leathern Thong whereby the Falconer holds the Hawk; the little Straps by which the *Lease* is fastened to the Legs, are called *Jesses*; and a Line or Pack-thread fastened to the *Lease*, in disciplining the Hawk, a *Creance*.

Hood, is a Cover for her Head to keep her in the Dark; a large wide Hood, open behind, to be wore at first, is called a *Rafter Hood*; and to draw the Strings, that the Hood may be in Readiness to be pulled off, is called unstriking the Hood.

Seeling, is the Blinding a Hawk, just taken, by running a Thread thro' her Eyelids, and thus drawing them over the Eyes, to prepare her for being hooded.

A *Lure*, is a Figure or Resemblance of a Fowl, made of Leather and Feathers.

The *Pearch*, is her Resting-place, when off the Falconer's Fist.

The *Hack*, is the Place where her Meat is laid.

The *Mew*, is the Place wherein she is set, while her Feathers fall and come again.

Being thus perfectly acquainted with the several Terms of the *Art of Falconry*, and informed of their respective Signification, we must apply ourselves next to the Management and Discipline of the Falcon, as being the Foundation of the *Art of Falconry*.

When a young Falcon is first taken, she must be seeled, and the Seeling at length gradually slackened, that she may be able to see what Provisions are brought her. Her Furniture is to be *Jesses* of Leather, mailed *Leashes*, with Buttons at the End, and *Bewits*; besides a small round Stick, hanging in a String, to stroke her frequently withal; which the oftner it is done, the sooner and better will she be manned: Two Bells on her Legs, that she may be the more readily found, or heard, when she stirs, scratches, &c. and a Hood raised, and bossed over her Eyes. Her Food to be Pigeons, Larks, and other live Birds, of which she is to eat twice or thrice a Day, and till she be full gorged. When the Falconer is about to feed her, he must hoop and lure, that she may know when to expect it; then unhooding her gently, he gives her two or three Bits, and putting her Hood on again, gives her as much more; but takes Care that she be close seeled, and after three or four Days, lessens her Diet; at going to Bed he sets her on a Pearch by him, that he may awake her often in the Night, continuing to do so till she grows tame and gentle. When she begins to feed eagerly, he gives her Sheeps-Hearts; and now he begins to unhood her by Day, but it must be done far from Company; feeds her and hoods her again, as before, but takes Care not to fright her with any Thing when he unhoods her, and if he can, reclaims her without over-watching. The Falcon must be borne continually on the Fist, till she be thoroughly manned, and induced to feed in Company: For two or three Days, give her washed Meat, and then Plumage, according as you esteem her foul within; if she casts, hood her again, and give her nothing, till she gleams after her Casting: But when she has gleamed and cast, give her a little hot Meat in Company; and towards Evening, let her plume a Hen's Wing, likewise in Company; cleanse the Feather of her Casting, if foul and slimy; if she clean within, give her gentle Casting;

Casting; and when she is well reclaimed, mann'd, and made eager and sharp set, venture to feed her on the Lure.

Three Things are to be considered before you lure your Falcon. 1. That she be bold and familiar in Company, and not afraid of Dogs and Horses. 2. Sharp-set and hungry, having Regard to the Hour of Morning and Evening, when you would lure her. 3. Clean within, and the Lure well garnished with Meat on both Sides. When you intend to give her the Length of a Lease, you must abscond yourself; she must also be unhooded, and have a Bit or two given her on the Lure, as she sits on your Fist; that done, take the Lure from her, and so hide it that she may not see it; when she is unfeeled, cast the Lure so near her, that she may catch it within the Length of her Lease; and as soon as she has seized it, use your Voice as Falconers do, feeding her upon the Lure on the Ground.

After you have lured your Falcon, in the Evening give her but little Meat, and let this luring be so timely, that you may give her Plumage, &c. next Morning on your Fist; when she has cast and gleamed, give her a little Beaching of warm Water, about Noon, tie a Creance to her Lease, go into the Field, there give her a Bit or two upon the Lure, and unfeel her; if you find she is sharp-set, and has eagerly seiz'd on the Lure, let a Man hold her to let her off to the Lure; then unwind the Creance, and draw it after you a good Way, and let him who has the Bird, hold his right Hand on the Tassel of her Hood, ready to unhood her as soon as you begin to lure; to which if she comes well, stoop roundly upon it, and hastily seize it, let her cast two or three Bits thereon; that done, unseize, take her off the Lure, and deliver her again to the Person that held her, and going further off the Lure, feed her as before; and so daily further and further off the Lure. Afterwards you may lure her in Company, but do not fright her; and having used her to the Lure on Foot, do it also on Horse-

back, which may be sooner accomplish'd, by causing Horsemen to be about you, when you lure her on Foot; 'tis also sooner done by rewarding her upon the Lure on Horseback, among Horsemen. And when she is grown familiar this Way, let some Body a Foot hold the Hawk, and he that is on Horseback must call, and cast the Lure about his Head, while the Holder takes off the Hood by the Tassels; and if she seizes eagerly on the Lure, without Fear of a Man or Horse, then take off the Creance, and lure at a greater Distance. Lastly, if you would have her love Dogs as well as the Lure, call Dogs when you give her Plumage.

Note, That if the Hawk be intended for some particular Sort of Game, her Lure must be a Resemblance of that Sort of Game; and the Falconer ought to make a frequent Practice of feeding, and rewarding her thereon, or on a Train of the same Kind; calling her when feeding, as if she was called to the Lure. And that it may be proper to feed her in such like Places, as those her Game is chiefly to be found in.

Note, Also, that a Brancher, Soar-Hawk, or Ramage-Hawk, needs no Nurfing; she is to be brought down from her Wildness, and habituated to another Course of Life; and in Pursuance of her own Views and Interests, to be made subject to those of her Master. An Eyess, needs no reclaiming, she is to be carefully nursed, and brought up in her natural Taments.

The Person who brings up, tames, and makes, that is, tutors and manages Birds of Prey, as Falcons, Hawks, &c. is called *Falconer*; the Emperor of the *Turks* usually keeps six thousand *Falconers* in his Service. The King of *France* has a grand *Falconer*, which is an Office dismembred from that of Great Hunt, *Grand Veneur*.

FEASTS.

F E A S T, *Festum*, (from *feriari*, to keep Holiday) is a particular Day, entirely dedicated to the Service of God, and celebrated with something particular to the *Feast*.

Feasts and the Ceremonies thereof, have made great Part of the Religion of all Nations and Sects, witness those of the *Greeks*, *Romans*, *Hebrews*, *Christians*, and *Mahometans*.

I cannot pretend to give here a full Description of all the *Feasts* celebrated by those different Nations, and Sects, and of the Ceremonies they were celebrated with, since that alone would make a large Volume; therefore I'll content myself, to give a concise Description of the most considerable of those *Feasts*; and tho' those celebrated by the *Romans*, are not the most ancient, notwithstanding, as they occur often in History, and I do not think proper to intermix them with the *Jewish* and *Christian Feasts*, since, *Non sunt miscenda Sacra Prophanis*, which I could not avoid, if I was to place the *Feasts* according to their Antiquity; since those of the *Hebrews*, were established long before the *Roman Feasts*; I'll begin by the *Roman Feasts*, proceed to those of the *Hebrews*, from thence to the *Christian Feasts*, and conclude with those of the *Mahometans*.

The stated *Feasts* of the *Romans*, or those which were celebrated with most Pomp and Ceremony, were the *Saturnalia*, *Cerealia*, *Lupercalia*, *Liberalia*, *Nep-tunalia*, *Consualia*, *Portumnalia*, *Vulcania*, *Palilia*, *Diralia*, &c.

The *SATURNALIA* were celebrated among the *Romans*, in honour of the God *Saturn*, tho' Mr. *Dacier* observes, that they were not only celebrated in honour

of *Saturn*, but also to keep up the Remembrance of the Golden Age, when all the World was on a Level.

The *Saturnalia* were not only observ'd at *Rome*, but also in *Greece*; and were in Reality much older than *Rome* itself. Some ascribe their Institution to the *Pelagii*, who were cast upon the Islands of *Delos*; others to *Hercules*, and others to *Janus*. *Goropius Becanus*, *Orig. Lib. 4.* makes *Noah* Author of them; that Patriarch, he tells us (but it is not an Article of Faith to believe him) in the Ark, instituted a Feast to be held the tenth Month, in Memory of this, that the Top of the Mountains began to appear above the Water; and this he makes the Origin of the *Saturnalia*: But it is very probable, the Year then began in Autumn, and of Consequence, *December* could not be the tenth Month. *Vossius* goes still higher, and will have it, that the *Saturn*, in honour of whom this *Feast* was instituted, was *Adam*; which Conjecture appears to me, as probable as that of *Becanus*, that is, that they are both without the least Appearance of Foundation; for as we cannot reasonably suppose, that the one had any other Knowledge of what passed in the Ark, but what he had learned from *Moses*, who does not so much as take the least Notice of those *Feasts*; neither can we imagine, that *Adam* has ever been considered as a Divinity; of which we do not find the least Hint in History.

During the Solemnity of the *Saturnalia*, the Slaves were reputed Masters, they were allowed to say any Thing, and in fine, were served at Table by the Masters themselves. Every Thing run into Debaucheries, and Dissoluteness, and nothing was heard or seen in the

the City of *Rome*, but the Tumult, Riot, and Disorder, of a People wholly abandoned to Joy and Pleasure. It was an Act of Religion not to begin any War, or execute any Criminal during this *Feast*.

The *CEREBALIA*, were the Feasts of *Ceres*, instituted by *Trystolemus*, Son of *Celeus*, King of *Eleusine* in *Attica*, in Gratitude for his having been instructed by *Ceres*, who was supposed to have been his Nurse, in the Art of cultivating Corn, and making Bread.

There were two *Feasts* of this Kind at *Athens*, the one called *Eleusinia*, the other *Theismophoria*.

The *Eleusinia*, were the most solemn and sacred Ceremonies in Use among the *Greeks*, for which Reason, they were called *Mysteries* by Way of Eminence. They are said to be instituted by *Ceres* herself, at *Eleusis*, a maritime Town of the *Athenians*, in Memory of the Zeal and Affection, wherewith the *Athenians* received her; this is the Account *Isocrates* gives in his Panegyrick; but *Diodorus Siculus* assures us, *Lib. 6.* that the *Eleusinia* were instituted by the *Athenians*, in Gratitude to *Ceres*, for having instructed them to lead a less barbarous and rustick Life. Yet the same Author, in the first Book of his *Bibliotheca*, relates the Thing in another Manner: A great Drought, says he, having occasioned a miserable Famine throughout all *Greece*; *Egypt*, which had that Year reap'd a most plentiful Harvest, bestow'd Part of the Fruits thereof upon the *Athenians*, and sent them by *Erietheus*; in Commemoration of which Benefaction, *Erietheus* was created King of *Athens*, who instructed the *Athenians* in these *Mysteries*, and the Manner of celebrating them. Tho' *Theodoret*, *Lib. 1. Græcænic. affect.* is of Opinion, that it was *Orpheus*, not *Erietheus*, who made this Establishment; and who instituted for *Ceres*, what the *Egyptians* practis'd for *Isis*; which Sentiment is confirm'd by the Scholiast, on the *Alæstes* of *Euripides*.

Eleusis, the City where these *Mysteries* were celebrated, was so jealous of the Glory thereof, that when reduced to the last Extremity by the *Athenians*, it would not surrender but on this Condition, that the *Eleusinia* should not be taken away; tho' these were no religious Ceremonies peculiar to the Town, but were held common to all *Greece*.

The Manner of these *Mysteries*, as related by *Arnobius* and *Lactantius*, was an Imitation, or Representation, of what Mythologists teach of *Ceres*. They lasted several Days, during which the People ran about with burning Torches in their Hands, sacrificed Abundance of Victims, not only to *Ceres*, but also to *Jupiter*; made Libations from two Vessels, one of them to the East, and the other to the West; marched in Pomp to *Eleusis*, making Pauses from Time to Time, wherein they sung Hymns, and sacrificed Victims: And this they perform'd, not only in going to *Eleusis*, but in returning back to *Athens*. For the rest, they were obliged to keep it an inviolable Secret; and the Law condemn'd to Death any one who should dare to divulge their *Mysteries*. *Tertullian*, in his Book against the *Valentinians*, relates, that the Figure shewn in the *Eleusinia*, and which was so expressly prohibited to be made publick, was that of a Man's privy Parts: *Theodoret*, *Arnobius*, and *Clemens Alexandrinus*, likewise, make Mention of it; but say it was the Figure of a Woman's Privities.

There were two Kinds of *Eleusinia*, the great and the less; those we have been hitherto speaking of were the greater. The lesser were instituted in favour of *Hercules*; for that Hero desiring to be initiated into the former, and the *Athenians* not being able to gratify him therein, by Reason the Law prohibited the Admission of any Stranger; being unwilling, however, to give him an absolute Denial, they instituted a new *Eleusinia*, whereat he assisted. The greater were held in the Month *Boedranion*, which answered to our *August*; and the lesser in the Month *Anthesterion*, which happened in our *January*.

People were only brought to partake of these Ceremonies by Degrees: At first, they were to be puri-

fied, then admitted to the lesser *Eleusinia*, and at last initiated into the greater. Those who were yet only at the lesser, were called *Mystæ*; and those admitted to the greater, *Epoptæ*, or *Ephori*, i. e. Inspectors. They were usually to undergo a Probation of five Years, e'er they passed from the lesser to the greater. Sometimes, indeed, they were contented with a single Year, immediately after which they were admitted to the most secret Parts of the Ceremony. *Meursius* has an express Treatise on the *Eleusinia*, where most of these Points are proved.

Note, That some Writers call the City where the *Eleusinia* were celebrated, *Eleusina*, not *Eleusis*: *Harpocratæ* confirms this Orthography, in deriving its Name from *Eleusinus*, a Son of *Mercury*; to which Sentiment, *Pausanias* likewise adheres in his *Atticks*. Others, who write it *ΕΛΕΥΣΙΣ*, *Advent*, suppose it thus called, by Reason, *Ceres*, after running over the World in Search of her Daughter, stopp'd here, and put an End to her Pursuit. *Diodorus Siculus*, *Lib. 5.* will have the Name *Eleusis* to have been given this City, as a Monument to Posterity, that Corn, and the Art of cultivating it, were brought from Abroad into *Attica*.

All the *Cerealia*, were celebrated with a great deal of Religion and Purity; so that it was esteemed a great Pollution, to meddle on those Days with conjugal Matters. It was not *Ceres* alone that was honoured here, but also *Bacchus*. The Victims offered were Hogs, by Reason of the Waste they make in the Products of the Earth: Whether there was any Wine offered or not, is Matter of much Debate among the Criticks. *Plautus* and *Macrobius* seem to countenance the negative Side; *Cato* and *Virgil* the positive. *Macrobius* says, indeed, they did not offer Wine to *Ceres*, but *Mulsam*, which was a Composition of Wine and Honey, boiled up together; and that the Sacrifice made on the twenty-first of *December*, to that Goddess and *Hercules*, was a pregnant Sow, together with Cakes and *Mulsam*; and this is what *Virgil* means by *miti Baccho*.

The *Cerealia* passed from the *Greeks* to the *Romans*, who held them for eight Days successively; commencing, as generally held, on the fifth of the Ides of *April*. It was the Women alone who were concern'd in the Celebration, all dress'd in white: The Men, likewise, in white, were only Spectators. They eat nothing till after Sun-set, in Memory of *Ceres*, who, in Search after her Daughter, took no Repast but in the Evening. After the Battle of *Canne*, the Desolation was so great at *Rome*, that there were no Women to celebrate the Feast, by Reason they were all in Mourning; so that it was omitted that Year.

The *LUPERCALIA* (from *Lupercal*, the Name of a Place under the *Palatine Mount*, where the Sacrifices were perform'd) were *Feasts* instituted in ancient *Rome*, in honour of the God *Pan*. They were celebrated on the fifteenth of the Calends of *March*, that is, on the fifteenth of *February*, or as *Ovid* observes, on the third Day after the Ides. They are supposed to have been established by *Evander*.

On the Morning of this Feast, the *Luperci*, or Priests of *Pan*, ran naked thro' the Streets of *Rome*, striking the married Women they met, on the Hands and Belly, with a Thong or Strap of Goat's Leather, which was held an Omen, promising them Fecundity, and happy Deliveries.

Note, That the *Luperci*, were the most ancient Order of Priests in *Rome*; they were divided into two Collects, or Companies, the one called *Fabii*, and the other *Quintillii*. To these *Cæsar* added a third, which he called *Julii*. *Suetonius* mentions the Institution of this new College of *Luperci*, as a Thing that rendered *Cæsar* more odious than he was: However, it appears from the same Passage of *Suetonius*, that this new Company was

not instituted by *Cæsar*, nor in honour of *Pan*, but by some Friend of *Cæsar*'s, and in honour of himself.

The Reason of this indecent Custom in celebrating the *Lupercalia*, took its Rise from *Romulus* and *Remus*; for while they were assisting at this *Feast*, a Body of Robbers, taking hold of the Occasion, plunder'd them of their Flocks: Upon this the two Brothers, and all the Youths that were with them, throwing off their Clothes to be the more expedite, pursued the Thieves, and recovered their Prey. This succeeding so well henceforward, this Ceremony became a Part of the *Lupercalia*; which were abolished in the Time of *Augustus*, but afterwards restored, and continued to the Time of the Emperor *Anastasius*. *Baronius* says it was abolished by the Pope in 496.

The *LIBERALIA*, were *Feasts* celebrated by the antient *Romans*, in Honour of *Liber*, or *Bacchus*. They took their Name from *Liber*, i. e. free; a Title conferr'd on *Bacchus* in Memory of the Liberty or Freedom he granted to the People of *Bæotia*; or perhaps because Wine, whereof he was the reputed Deity, delivers Men from Care, and sets their Minds at Ease and Freedom. *Varro* derives the Name of this *Feast* from *Liber*, consider'd as a Noun Adjective, and signifying *free*; because the Priests were free from their Function, and eas'd of all Care during the Time of the *Liberalia*. For in Effect it was the old Women who officiated in the Ceremonies and Sacrifices of these *Feasts*.

The *Greeks* call'd the same *Feasts*, *Dionysia*, or *Dionysiaea* (from the Greek Διονυσια, of Διονυσος, *Bacchus*; and that of Διός, the Genitive of *Zeus*, *Jupiter*, and *Nysa*, a City in *Egypt*, on the Frontiers of *Arabia*, where *Bacchus* is said to have been educated by the Nymphs.)

There were Festivals under the Denomination of Διονυσια, *Dionysia*, chiefly two; viz. first the antient αρχαιωτερα, probably the same with μεγαλα, or the greater *Dionysia*; sometimes also called by way of Eminence Διονυσια, without other Addition, as being the most celebrated of all *Bacchus* Festivals at *Athens*; where it was held in the Month *Elaphelion*. Secondly the new, Νεωτερα, probably the same with μικρα, or the lesser *Dionysia*, held in Autumn, as a Sort of Preparation to the greater. Some will have this the same with Διονυσια ληναια, so called from ληνος, a *Wine-press*, and place it in the Month *Lenæon*.

The *NEPTUNALIA*, were *Feasts* held in Honour of *Neptune* in general, and not consider'd under any particular Quality. They were celebrated on the tenth of the Calends of *August*.

There were other *Feasts* of *Neptune*, call'd *Consualia*; that God being particularly consider'd, then, as presiding over Horses and the Manage. The *Consualia* were introduced with a magnificent Cavalcade, or Procession on Horseback; by reason *Neptune* was reputed to have first taught Men the Use of Horses; whence his Sirname of Ιππιος, *Equestris*. *Evander* is said first to have invented this *Feast*: It was re-established by *Romulus*, under the Name of *Consus*, in regard it was some God under the Denomination of *Consus*, that suggested to him the Rape of the *Sabines*. It is said, that it was with a View to this Rape, that he made that Establishment. This however is certain, that it was to this *Feast* all his Neighbours were invited; when taking Advantage of the Solemnities and Sacrifices, he seized the Women. To draw the greater Concourse of People, he gave out, that he had found an Altar hid under Ground, which he intended to consecrate, with Sacrifices to the God to whom it had been originally erected. Those who take upon them to explain the Mysteries of the Heathen Theology, say, that the Altar hid under Ground is a Symbol of the secret Design of *Romulus* to seize his Neighbours Wives.

The *Consualia* were of the Number of the *Feasts* call'd *sacred*; as being consecrated to a Divinity. Originally they were not distinguished from those of the

Circus; whence it is that *Valerius Maximus* says, that the Rape of the *Sabines* was effected at the Games of the Circus. *Plutarch* observes, that during the Days of this Solemnity, Horses and Asses were left at Rest, and were dressed out with Crowns, &c. on Account of its being the *Feast* of *Neptunus Equestris*. *Festus* says, the Cavalcade was perform'd with Mules; it being an Opinion, that this was the first Animal used to draw the Car. *Servius* gives us to understand, that the *Consualia* fell on the thirteenth of *August*: *Plutarch*, in *Romulo*, places them on the eighteenth, and the old *Roman* Calendar, on the twenty-first Day of the Month.

The *PALILIA*, by some call'd *Parilia*, were a *Feast* in Honour of the Goddess *Pales*; and celebrated by the Shepherds on the first of *May*; to beseech that Goddess to take Care of their Flocks, and preserve them from Wolves and Diseases. Part of the Ceremony consisted in lighting Heaps of Straw, and jumping over them.

The *PAGANALIA*, were an antient rural *Feast*, thus call'd, because it was celebrated in the Villages in *Pagis*. In the *Paganalia*, the Peasants went in solemn Procession all around the Village, making Lustrations to purify it. They had also their Sacrifices, wherein they offer'd Cakes on the Altars of the Gods. *Halicarnasseus* and *St. Jerom* refer the Institution of the *Paganalia*, to *Servius Tullus*: They were held in the Month of *February*.

The *DIVALIA*, was a *Feast* held on the twenty-first of *December*, in Honour of *Angenora*, the Goddess of Patience and Silence; whence it is also called *Angeronalia*. This *Feast* was established on occasion of a Disease which destroyed Man and Beast; which was a kind of Squinancy, or Inflammation and Swelling of the Throat, called in *Latin* *Angina*. On the Day of this *Feast* the Pontifices performed Sacrifices in the Temple of *Volupia*, or the Goddess of Joy and Pleasure, who was the same with *Angenora*; and supposed to drive away all the Sorrows and Chagrin of Life.

The *Romans* had also *Feasts* instituted occasionally, as the *Carmentalia*, *Querinalia*, *Terminalia*, *Floralia*, *Compitalia*, *Lemuria*, *Vermalia*; besides other moveable and occasional ones, as to give Thanks to the Gods for Benefits received; to implore their Assistance, or to appease their Wrath, &c. as the *Paganalia*, *Feralia*, *Bacchanalia*, *Ambarvalia*, *Suovetaurilia*, and divers others, particularly denominated *Ferie*, as *Sementinae*, *Latinae*.

The *CARMENTALIA*, was a *Feast* celebrated annually on the 11th of *January*, in honour of *Carmenta* or *Carmentis*, a Prophetess of *Arcadia*, Mother of *Evander*, with whom she came into *Italy* 50 Years before the *Trojan* War. The Solemnity was also repeated on the 15th of *January*, which is marked in the old Calendar, by *Carmentalia Relata*. This *Feast* was established on occasion of a great Fecundity among the *Roman* Dames, after a general Reconciliation with their Husbands, with whom they had been at Variance in regard of the Use of Coaches being prohibited them by an Edict of the Senate. It was the Women who celebrated this *Feast*: He who offered the Sacrifices was called *Sacerdos Carmentalis*. Authors are divided about the Origin of the Word *Carmenta*: *Vigenera* says, the Prophetess was so called, *Quasi carens mente*, out of her Senses, or out of herself; by reason of the Enthusiasm she frequently fell into. Others say, she took her Name from *Carmen*, Verse, because her Prophecies were couched in Verses: But *Vigenera* on the contrary, maintains *Carmen* to be derived from *Carmenta*.

The *QUIRINALIA*, were *Feasts* celebrated in honour of *Romulus*, who was called *Quirinus*.—The *Quirinalia*, called also *Stultorum Ferie*, were held on the 13th of the Calends of *March*, i. e. on our 17th of *February*.

The *TERMINALIA*, were *Feasts* celebrated in honour of the God *Terminus*. *Varro* is of Opinion this *Feast* took its Name from its being at the Term or End of the Year: But *Festus* is of a different Sentiment,

ment, and derives it from the Name of the Deity, in whose Honour it was held. In Reality, the *Terminalia*, or Feast of Land-marks, was held in honour of *Jupiter*, considered in the Capacity of Conservator of the Land-marks and Bounds. *Dionysius Halicarnassensis* tells us, that it was *Numa Pompilius*, who first consecrated Land-marks to *Jupiter*; and adds, that the same Prince appointed an anniversary Day, wherein the Country People assembling together on the Bounds of the Lands, should offer Sacrifices in honour of the Tutelary Gods thereof.—The *Terminalia* were held on the 17th, or as *Struvius* will have it, on the 10th of the Calends of *March*. No Animal was to be sacrificed herein, it being deemed unlawful to stain the Land-marks with Blood: They only offered Sacrifices of the first Fruits of the Earth, and this in the open Air, and on the Spot where the Land-marks were.

The *FLORALIA*, also called *Anthistessis*, is a general Name for the Feasts, Games, and other Ceremonies, held in honour of the Goddess *Flora*.—They were held at the latter End of the Month of *April*, as *Ovid* witnesses,

Exit, & in majus festum florale calendas.

In effect the *Floralia* began on the 28th of *April*, and lasted six Days. They who assisted at the Ceremony were crowned with Ivy, and committed a World of Indecencies; which indeed was no extraordinary Thing in the Heathen Feasts. Some apply the Word *Floralia* indifferently to the Feasts and Games of this Goddess; but others restrain it to the Feasts alone, calling the Games *Ludi florales*. For my Part, as I find no Difference between *Floralia*, and *Ludi florales*, since most of the principal Ceremonies of the Heathen Feasts were Games, I'll mention the *Florales* Games with the *Floralia*.

Note, That the *Ludi florales* were celebrated with horrible Debaucheries. The most licentious Discourses were not enough; but the Courtesans were called together by the Sound of a Trumpet, made their Appearance naked, and entertained the People with abominable Shews and Postures: The Comedians appeared after the same Manner on the Stage. *Val. Maximus* relates, that *Cato* being once present in the Theatre on this Occasion, the People were ashamed to ask for the infamous Pleasure in his Presence, till *Cato*, apprized of the Reservedness and Respect he inspired them withal, withdrew, that the People might not be baulked of their accustomed Diversion. There were divers other sorts of Shews exhibited on this Occasion; and if we may believe *Suetonius* in *Galba*, c. 6. and *Vopiscus* in *Carinus*, these Princes presented Elephants dancing on Ropes.

The *Ludi Florales*, according to *Pliny*, l. xviii. c. 29. were instituted by Order of an Oracle of the *Sibyls*, on the 28th of *April*; not in the Year of *Rome* 416, as we commonly read it in the ancient Editions of that Author; nor in 414, as *F. Harduin* has corrected it; but as *Vossius* reads it in 513, they were chiefly held in the Night-time, in the *Patrician Street*: Some will have it there was a Circus for the Purpose on the Hill called *Hortulorum*. The Goddess *Flora* is by some held to be the same with the *Chloris* of the *Greeks*. Others maintain that this same *Flora* was a famous Courtesan at *Rome*, who having enriched herself by Prostitution, made the People of *Rome* her Heir, on Condition that they should celebrate the Anniversary of her Birth-day, by the Games and Feasts above-mentioned. Some Time afterward, the Senate judging such a Foundation unworthy the Majesty of the *Roman* People; to ennoble the Ceremony, converted *Flora* into a Goddess, whom they supposed to preside over Flowers; and so made it a Piece of Religion to render her propitious, that it might be well with their Gardens, Vineyards, &c.—This is the common Account; but *Vossius de Idol.* l. i. c. 12.

can by no Means allow the Goddess *Flora* to have been the Courtesan above-mentioned: He will rather have her a sublime Deity, and thinks her Worship might have commenced under *Romulus*: His Reason is, that *Varro*, in his fourth Book of the *Latin Tongue*, ranks *Flora* among the Deities, to whom *Tatius*, King of the *Sabines*, offered up Vows before he joined Battle with the *Romans*. And, that from another Passage in *Varro* it appears, that there were Priests of *Flora* with Sacrifices, &c. as early as *Romulus* and *Numa*.

The *COMPITALIA* or *Compitalia*, were Feasts held in honour of the *Lares*. These Feasts were more ancient than the Building of *Rome*. *Dionysius Halicarnassensis* and *Pliny* indeed say, they were instituted by *Servius Tullus*; but this only signifies that they were then introduced into *Rome*. Notwithstanding what *Dion* relates, that the *Compitalia* were celebrated a little after the *Saturnalia*; and that the *Roman* Cænder fixes them on the 12th of *January*: It appears, that they had not any fixed Day, at least not in the Time of *Varro*, as is observed by *Casaubon*. The Feast being thus moveable, the Day whereon it was to be observed was proclaimed every Year. It was ordinarily held on the 4th of the Nones of *February*, i. e. on the second of that Month. *Macrobius* observes, that they were held not only in honour of the *Lares*, but also of *Mania*, Madness. The Priests who officiated at them were Slaves, and *Siberi*; and the Sacrifice, a Sow.

The *Compitalia* were re-established, after a long Neglect, by *Tarquin* the Proud, on occasion of an Answer of the Oracle, that they should sacrifice Heads for Heads, i. e. that for the Health and Prosperity of each Family, Children were to be sacrificed: But *Brutus* after expelling the Kings, in lieu of those barbarous Victims, substituted the Heads of *Garlick* and *Poppy*; thus satisfying the Oracle which had enjoined capital Heads. During the Celebration of this Feast, each Family placed at the Door of their House, the Statue of the Goddess *Mania*: They also hung up at the Doors Figures of Wool, representing Men and Women accompanying them with Supplications, that the *Lares* and *Mania* would be contented with those Figures, and spare the People of the House. As for Slaves in lieu of the Figures of Men, they offered Bales or Fleeces of Wool. *Servius Tullus* ordered, that Slaves who assisted at the *Compitalia*, should be free during the whole Time of the Feast. *Augustus* ordered the Statues of the *Lares* placed in the Cross-ways, to be adorned with Flowers twice a Year.

LEMURIA, or *Lemuralia*, was a Feast solemnized at *Rome* on the 9th of *May*, to pacify the Manes of the Dead, or in honour of the *Lemures* which were Spirits and *Hobgoblins*; restless Ghosts of departed Persons, who returned to terrify and torment the Living.

The Institution of this Feast is ascribed to *Romulus*; who, to rid himself of the Phantom of his Brother *Remus* (whom he had order'd to be murder'd) appearing always before him, order'd a Feast, call'd by his Name *Remuria*, or *Lemuria*. In the *Lemuria* they offered Sacrifices for three Nights together; during which Time all the Temples of the Gods were shut up, nor any Marriages permitted. There was a vast Number of Ceremonies in this Feast, chiefly intended to exorcise the *Lemures*, and prevent their appearing, or giving any Disturbance to the Living.

Note, That the *Lemures* are the same with *Larvæ*, which the Antients imagined to wander round the World, to frighten good People, and plague the bad. For which Reason, the *Lemuria* were instituted to appease the Manes of the Defunct. *Apuleius* explains the ancient Notion of the *Manes* thus: The Souls of Men released from the Bands of the Body, and freed from performing their bodily Functions, became a Kind of Demons or *Genii*, formerly call'd *Lemures*. Of these *Lemures*, those that

that were kind to their Families, were call'd *Lares familiares*; but those who for their Crimes, were condemned to wander continually without meeting with any Place of Rest, and terrified good Men, and hurt the bad, are vulgarly called the *Larvæ*. An antient Commentator on *Horace* mentions, that the *Romans* wrote *Lemures* for *Remures*; which last Word was formed from *Remus*, who was killed by his Brother *Romulus*, and who returned to Earth to torment him. But *Apuleius* observes that in the antient *Latin* Tongue, *Lemures* signifies the Soul of a Man separated from the Body by Death.

The *FORALIA*, was a *Feast* held on the twenty-first of *February*, in honour of the Dead; also called *Februa*. *Macrobius*, *Saturn.* l. i. c. 13. refers the Origin of the Ceremony to *Numa Pompilius*; and tells us, that Sacrifices were here perform'd, and the last Offices paid the Shades of the Defunct: And from this *Feast* it was, that the Month of *February* took its Name. The Design of these Sacrifices is somewhat controverted: *Pliny* says, they were performed to render the infernal Gods propitious to the Deceased; tho' some of the Moderns have imagined, that they were intended to appease the Deceased themselves, and were offered immediately to them as a Sort of Duties: What confirms the former Sentiment, is, that *Pluto* himself is surnamed *Februus*: They lasted twelve Days.

The Word is of an antient Standing in the *Latin* Tongue: From the very Foundation of the City, we meet with *Februa* for Purifications; and *februare*, to purge or purify. *Varro*, *de Ling.* l. 2. derives it from the *Sabines*: *Vossius*, and others, from *ferveo*, I am hot; by reason Purifications were chiefly performed with Fire and hot Water. Some go higher, and even deduce the Word from *phur*, or *phavar*, which in *Syriack* and *Arabick* has the same Signification with *ferbuit*, or *eserbuit*; and might probably, likewise, signify to purify; for *phavar*, in *Arabick*, denotes a Preparative given to Women in Child-bed, to bring away the After-birth, and other Impurities remaining after Delivery; much as among the *Romans*, who gave the Name *Februa* to the Goddess, supposed to preside over the Delivery of Women.

Ovid, in his *Fasti*, goes back as far as *Aeneas* for the Institution of the *Ferialia*; and adds, that on the same Day, a Sacrifice was performed to the Goddess *Muta*, or dumb; and that the Persons who officiated were an old Woman, attended with a Number of young Girls. *Varro* derives the Word *Ferialia*, from *inferi*, or from *fero*, on account of a Repast carried to the Sepulchres of such as the last Offices were that Day render'd to. *Festus* derives it from *ferio*, on account of the Victims sacrificed. *Vossius* observes, that the *Romans* called Death *Fera*, cruel, and that the Word *Ferialia* might arise thence.

The *BACCHANALIA*, were a *Feast* in honour of *Bacchus*, celebrated with great Solemnity among the Antients, particularly the *Athenians*, who even computed their Years thereby, till the Commencement of the Olympiads. They are also sometimes called *Orgia*, from the *Greek* *ὄργη*, Fury, Transport; by reason of the Madness and Enthusiasm wherewith the People appeared to be possessed at the Time of their Celebration.

The *Bacchanalia* were held in Autumn, and took their Rise from *Egypt*; whence, according to *Diodorus*, they were brought into *Greece* by *Melampus*. The Form and Disposition of the Solemnity depended at *Athens* on the *Archon*, and was at first exceedingly simple; but by Time became encumbered with a Number of ridiculous Ceremonies, and attended with much Dissoluteness and Debauchery, insomuch that the *Romans*, who grew ashamed of them, suppressed them by a *Senatus-Consultum* throughout all *Italy*. The Women had a great Share in the Solemnity, which is said to have been instituted on their Account: For a great Number of them attending *Bacchus* to the Conquest of the *Indies*, and carrying in their Hands

the *Thyrus*, *i. e.* a little Lance covered with Ivy and Vine-Leaves, singing his Victories and Triumphs wherever they went; the Ceremony was kept up after *Bacchus's* Deification, under the Title of *Bacchanalia*, and the Women were install'd Priestesses thereof, under that of *Bacchæ*, or *Bacchantes*. These Priestesses, at the Time of the Feast, ran thro' the Streets, and over the Mountains, cover'd with Tygers Skins, their Hair dishevelled, their *Thyrus* in one Hand, and Torches in the other, howling and shrieking. Men and Women met promiscuously at the Feast, all perfectly naked, except for the Vine-Leaves and Clusters of Grapes which bound their Heads, and Hips: Here they danced and jumped tumultuously, and with strange Gesticulations, sung Hymns to *Bacchus*, till weary and giddy they tumbled down distracted.

The *AMBARVALIA*, were a *Feast*, celebrated annually by the *Romans* to expiate their Grounds, and procure of the Gods a happy Harvest. At these *Feasts* they sacrificed a Bull, a Sow, and a Sheep; which before the Sacrifice, were led in Procession thrice around the Fields; whence the Feast is supposed to have taken its Name, from the *Greek* *ἀμφί*, about; or the *Latin* *ambio*, I go round, and *arvum*, Field. Though others write it *Amberbalia*, and deduce it from *Ambire Urbem*, to go round the City. From the Beasts offered in Sacrifice, the Ceremony was also called *Suovetaurilia*. *Halicarnassus* describing the same, calls it *Solitaurilia*, in Regard it was requir'd that the Victims were perfect, and without any Defect; *Sollus*, or *Solus*, in the Language of the *Osce*, signifying *integer*, entire. It is not certain whether this Feast was fix'd, or moveable; nor whether it was celebrated once or twice a Year; Authors being of different Opinions on both those Heads. The *Ambervale Carmen*, was a Prayer prefer'd on this Occasion, whereof we have the Formula preserv'd in *Cato*, c. 141. *de re Rusticâ*. The Priests who chiefly officiated at the Solemnity, were called *Fratres Arvales*, instituted by *Romulus*, and were twelve in Number; all of them Persons of the first Distinction; the Founder himself having been of the Body. They made a College, called *Collegium Fratrum Arvalium*. The Mark of their Dignity was a Garland, compos'd of Ears of Corn, tied with a white Ribband, which *Pliny* says, was the first Crown in Use at *Rome*. According to *Fulgentius*, *Acca Laurentia*, *Romulus's* Nurse was the first Founder of the Order of Priests; she, it seems, had twelve Sons, who used to walk before her in Procession to the Sacrifice; one of whom dying, *Romulus*, in favour of his Nurse, promis'd to take his Place; and hence, says he, came this Sacrifice, the Number of twelve, and the Name of Brother. *Pliny*, *Lib.* 17. c. 2. seems to indicate the same Thing, when he mentions that *Romulus* instituted Priests of the Fields, after the Example of *Acca Laurentia* his Nurse.

Note, That *Scaliger*, in his Notes on *Festus*, followed by many others, maintains *Ambarbalia*, or *Amburbia*, to be the same with *Ambarvalia*.

The *Ferie* among the *Romans*, were Holidays; or Days wherein they abstained from Work. The Word *Ferie*, is usually derived a *ferendis Victimis*, on Account of the Victims killed on these Days. *Martinius* says, that *Ferie* were so called *velut septuagesimæ*, *Dies Sacri*, Holidays. Others observe, that all Days in general, tho' they were not Feast-Days, were antiently called *Feste*, or as *Vossius* reads it, *Fisie*; whence, according to that Author, was formed the Word *Ferie*. The *Ferie*, or *Dies feriales*, were observed, and distinguished chiefly by Rest; whereas the *Feasts*, or *Dies festi*, besides a Cessation from Labour, were celebrated with Sacrifices, and Games; so that there were *Ferie*, which were not Feast-Days, though Authors frequently confound the *Ferie*, and *Festi*. Others confound the *Ferie*, with the *Dies nefasti*, or Non-Court Days.

The *Romans* had divers Kinds of *Ferie*, their Names, at

at least the principal thereof, are *Æstivales*, or Summer *Feriæ*; *Anniversariæ*, yearly *Feriæ*; *Compitalitiæ*, *Feriæ* of the Streets, and Cross-ways; *Caiceptivæ*, votive *Feriæ*, which the Magistrates promised every Year; *Denicales*, for the Expiation of a Family, polluted by the Death of any one; *Imperativæ*, or *Indictivæ*, those decreed by the Magistrate; *Latinae*, the Latin *Feriæ*, instituted by *Tarquin* the Proud, for all the Latin People amounting to above fifty Nations, being celebrated by *M. Alba*, in Memory of the Peace concluded by *Tarquin*, with the People of *Latium*; *Messis Feriæ*, those of Harvest; *Præcidaneæ*, which were what we properly call the Vigils, or Eves of the Feasts; *Privatæ*, or *Propriæ*, those peculiar to the several Families; as the *Familia*, *Claudia*, *Æmilie*, *Julie*, &c. *Publicæ*, those observ'd by all in general, or for the publick Weal; *Sementinæ*, those held in Seed-time; *Stativæ*, those kept constantly to the same Day of the Year; *Stultorum Feriæ*, or *Quirinaliæ*, the *Feriæ* of Fools, held on the seventeenth of February; *Victoriæ Feriæ*, those of Victory in the Month of August, to the fifteenth of October; *Vulcani Feriæ*, those of *Vulcan*, which fell on the twenty-second of May.

Note, That *Feriæ* was also used among the Romans, for Fair Days; by Reason it was the Custom to hold their Fairs, on the *Dies feriati*, or Holidays.

The Feasts among the Antients, were divided into Days of Sacrifice, Days of Feasting, or Banqueting, Days of Games, and Days of Rest, or *Feriæ*, lately mention'd.

A SACRIFICE, properly speaking, is an Offering made to God on an Altar, by Means of a regular Minister, as an Acknowledgment of his Power, and a Payment of Homage. But this is not a proper Definition of the *Sacrifices* of the Pagans; since they had not a true Altar, nor regular Ministers, neither were their Sacrifices offered to the true God.

The *Phœnicians* are usually held the first Authors of *Sacrifices*; *Porphyri*, indeed, attributes the Invention to the *Egyptians*, who, he says, first offer'd the first Fruits of their Ground to the Gods; burning them upon an Altar of Turf. At length they came to burn Perfumes, and at last sacrific'd Animals; observing that they first eat some Herbs, or Fruits, regularly offer'd on the Altar. He adds, that Libations were very frequent, e'er *Sacrifices* of Beasts got Footing.

Note, That Libation was a Ceremony in the Heathen Sacrifices, wherein the Priest spilt some Wine, Milk, or other Liquor, in honour of the Deity to whom the Sacrifice was offer'd, after having first tasted it himself. *Alexander* is said to have sacrific'd a Bull to *Neptune*; and for an Offering to the Sea-Gods, threw the golden Vessel, us'd for the Libation into the Sea. Libations were also in Use under the Law of *Moses*, being enjoin'd by God in *Exodus xxix*, and *Numbers xv*.

Ovid observes, that the very Names, *Victim* and *Hestia*, import that they were not slain, till such Time as Victories were obtained over Enemies: Indeed, while Men liv'd on Herbs and Pulse, it is no wonder they abstain'd from *Sacrifices* of Beasts, since the Law of *Sacrifices* requir'd, that they should eat some Part thereof. In Effect, it is supposed to be this that first introduc'd Flesh as Food, and made Man a carnivorous Animal. The Truth is, in all Antiquity, both sacred and profane, *Sacrifices* were ordinarily nothing else but holy Banquets.

The Scripture furnishes us a somewhat different Account; *Noah* certainly sacrific'd Animals at his coming out of the Ark; and it is even suggested, that *Abel* himself sacrific'd the best and fattest of his Flocks; though *Grotius* thinks it more probable, he contented himself with making a mere Oblation of his Lambs, &c. to God, without sacrificing them; *Macrobius* tells us, that the *Egyptians* long accustomed to bloodless Sacrifices, being at length oblig'd to admit the

Worship of *Serapis* and *Saturn*, to whom Victims were to be sacrific'd; would not allow their Temples to be built in the Cities. These Victims, however, or bloody Sacrifices, at length obtain'd, in Exclusion of almost all the rest: The most usual among the Antients, were Bulls, Oxen, Cows, Sheep, and Lambs, in Regard these were the most ordinary Food of Man. The Manner of sacrificing among the *Hebrews*, is amply describ'd in the Books of *Moses*: That in Use among the *Romans* is as follows.

In the Choice of the Victim, Care was taken it was without Blemish or Imperfection, its Tail not too small at the End; the Tongue not black, nor Ears cleft; and the Bulls such as had never been yok'd. The Victim pitch'd upon, they gilt its Forehead and Horns, especially if a Bull, Heifer, or Cow; the Head they also adorn'd with a woollen Infula, whence hung two Rows of Chaplets, with twisted Ribbands; and on the Middle of the Body, a Kind of Pole, pretty large, hung down on both Sides: The lesser Victims were only adorn'd with Bundles of Flowers, and Garlands, together with white Shafts or Garlands. The Victims thus made ready, were brought before the Altar; the lesser were not led by a String, but driven to the Place; the greater were conducted in a Halter, if they made any Struggle, or refused to go, the Resistance was taken for an ill Augury, and the *Sacrifice* set aside. The Victim thus brought to the Altar, was examin'd with a great deal of Circumspection, to see if there were no Defect in it; then the Priest being clad in his sacerdotal Habit, and accompanied with the *Sacrificers*, and other Attendants, and being wash'd and purify'd according to the Ceremonies prescrib'd, began the *Sacrifice*, with making a loud Confession of his Unworthiness, acknowledging himself guilty of divers Sins, for which he begg'd Pardon of the Gods, hoping they would be pleas'd to grant his Requests. These Confessions were like those of the *Hebrews*, with this Difference, that the Pagans confess'd the Frailty of Mankind, and own'd their Faults; the *Jews* confess'd chiefly the Greatness of God, accompanying it with Hymns and musical Instruments. The Confession over, the Priest cried aloud, *Hoc age*, i. e. compose yourselves and mind your Business; and presently an Usher, holding a Rod in his Hand, call'd *Commentaculum*, went through the Temple, and made all those withdraw, who were not initiated in the Mysteries of Religion, or such as were excommunicated.

The Custom of the *Greeks*, from whom the *Romans* borrow'd theirs, was, that the Priest coming to the Altar, should ask aloud, *τις τιδε?* who is here? The People answer'd, *Πολλοι καὶ ἀγαθοι*, many good Persons; then the Usher went through the Temple, crying, *Εκας εκας εσε βεβηλοι*, that is, out with the Wicked. The *Romans* commonly us'd the Words, *Nocentes, prophani abscedite*. All those who were driven out of the Temple among the *Greeks*, were comprehended under these general Words, *βεβηλοι, αμυητοι, αναθαροι*; the Profane being withdrawn, they cried, *Favete Linguis*, or *Animis*, and *Pascite Linguam*, to require Silence and Attention, during the *Sacrifice*.

These Ceremonies ended, the chief *Sacrificer* being fate down, and the rest of them standing, the Magistrates, or private Persons who offer'd *Sacrifices*, came before him, and presented him with the First-Fruits and Victims, and sometimes made a short Discourse by way of Compliment; as we find *Homer* makes *Ulysses* do, when he presented the High-Priest with *Iphigenia* to be sacrificed. As any Person came to present his Offering, he washed his Hands in a Place appointed in the Temple for that Purpose. Lastly, when the Offering was made, the Priest that officiated, perfum'd the Victim with Incense, and sprinkled it with lustral Water; and having washed his Hands, and got up again to the Altar, he pray'd to the God to whom he presented the *Sacrifice*, with a loud Voice, that he would accept of those Offerings, and be pleas'd with the Victim he sacrificed to him, for the publick Good, and for such and such Things in particular.

particular. In the Close of the Offertory and Prayer, made by the Priest to the Gods, he came down the Steps of the Altar, and from the Hand of one of his Assistants, received the sacred Paste, called *mola salsa*, made of Barley or Wheat-Flour, mixed with Salt and Water, which he threw upon the Head of the Victim, sprinkling a little Wine upon it, which was called *Immolatio*. *Servius* says, the Priest scatter'd little Bits of this Paste upon the Head of the Victim, the Altar where the sacred Fire burned, and the Knives by way of Consecration.

He then took Wine in a Vessel call'd *Simpulum*, and having tasted it himself first, and made his Assistants do the same, to shew that they partook of the Sacrifice; he poured it between the Horns of the Victim, pronouncing these Words of the Consecration, *Mactus hoc vino inferis esto*; let this Victim be improved and honoured by this Wine. This done, he pulled off the Hairs from between the Horns, and threw them into the Fire. And commanded the *Victimarius*, who asked him again, shall I strike? to knock down the Victim with a Blow on the Head with an Hammer, or Axe; upon which another Assistant, named *Popa*, presently thrust a Knife into his Throat; while a third received the Blood, wherewith the Priests sprinkled the Altar.

When the Victim was slain they flea'd him, if it was not a Burnt-offering, (for then they burned Skin and all) took the Flesh off the Head, and adorning it with Garlands and Flowers, fastened it to the Pillars of Temples, as well as the Skins, as Ensigns of Religion; carrying them about in Procession in publick Calamities: Not but that the Priests often wore the Skins, and others went to sleep upon them in the Temple of *Æsculapius* and *Faunus*, that they might receive favourable Responses in their Dreams, or be cured of their Maladies. They then opened the Victims Entrails, and after circumspectly viewing them, to draw Presages therefrom, according to the Art of the *Aruspices*, they flowered them with Meal, and sprinkled them with Wine, and made a Present of them to the Gods, *reddebant exta Diis*, by throwing them into the Fire in small Bits, boiled or parboiled; and hence the Entrails were called *porrice*. The Entrails being burned, and the other Ceremonies finished, they believed the Gods to be satisfied; and that they could not fail to find their Vows accomplished, which they expressed by the Word *litare*, *q. d.* all is finished, and well done; whereas *non litare*, on the contrary, intimated there was something wanting to the Perfection of the Sacrifice, and that the Gods were not appeased. The Priest afterwards dismissed the People, with this Word *ilicet*.

Hence it may be observed, that the Sacrifices consisted of four principal Parts; the first called *Libatio*, or the pouring a little Wine upon the Victim; the second *Immolatio*, when, after they had scattered the Crumbs of salted Paste thereon, they killed it; the third *Redditio*, when they offered the Entrails to the Gods; and the fourth *Litatio*, when the Sacrifice was perfected without any Fault.

The Romans had Sacrifices, or Ceremonies, call'd *Lustration*, by which they purified their Cities, Fields, Armies, or People, defiled by any Crime, or Impurity. These *Lustrations* were either publick or private, and performed in three Manners, *viz.* by Fire and Sulphur, by Water, and by Air; which last was done by fanning and agitating the Air round the Thing to be purified. There was also a particular Kind of *Lustration* for young Children.

John Lomeir of *Zutphen* says, that all Persons, Slaves only excepted, were Ministers of some Sort of *Lustration*. When any one died, the House was to be swept after a particular Manner, by way of Purification: The Priest threw Water on new married People, with the like Intention. To purify themselves, People would even sometimes run naked thro' the Streets, such was their Extravagance: And as if Fancy was not fertile enough in inventing Modes of *Lustration*, they even used Enchantments to raise the

Dead, in order to get Instructions what they must do to purge themselves of their Sins. Add, that they frequently raised the Opinion of the Sanctity of their Expiations by fictitious Miracles. The Birds, say they, practise *Lustration*, both by washing themselves, and throwing Water on their Nest. The Hen takes Straw, and uses it to purify her Chickens. There was scarce any Action, the Beginning and End of which the Gentiles did not perform some Ceremony to cleanse themselves, and appease the Gods. When they had no Animals to sacrifice, they made the Figure they would offer in Dough, Metal, or other Matter; and thus sacrificed in Effigy.

Some Expiations were performed in the Water; for which Reason certain Fountains and Rivers were in great Reputation: Others were performed in the Air. A certain Heathen caused himself to be seriously sifted in a Sieve, as we now sift Corn: Another hung himself by a Cord, and was tossed backwards and forwards: Another shut his Eyes, and set himself blind-fold, to find a Nosegay tied to a Cord: Others play'd at See-saw, as a more efficacious Way of appeasing the Gods. Fire was much used for Expiation: Sometimes the Penitents were cast into the Fire, and others only brought to the Flame, or Smoak. It was common, on these Occasions, to shed human Blood: The Priests of *Cybele*, *Bellona*, and *Baal*, made cruel Incisions on themselves. *Ereuthenus*, King of *Attica*, sacrificed his Daughter to *Proserpina*. Several had their Throats cut at *Rome*, to obtain the Emperor's Health from the Gods. Those who commanded Armies, offered one of their Soldiers, to appease the Anger of the Gods; that he alone might suffer all the Wrath the Army deserved. All Sorts of Perfumes and odoriferous Herbs had Place in *Lustration*. There is scarce any Pot-Herb, Pulse, true Mineral, or Metal, which they did not offer the Gods by Way of Expiation; nor did they forget Milk, Bread, Wine, or Honey: What is more, they made use of the very Spittle and Urine. The Egg was much used among them, as being the Symbol of the four Elements: Its Shell, they say, represents the Earth; the Yolk, a Globe of Fire; the White, resembles the Water; and besides it has a Spirit, which represents the Air. It is for this Reason, that the *Bonza's*, or *Indian* Priests, believe to this Day, that the World came out of an Egg.

The Poets had feigned that the Gods purified themselves; and they did not omit to purify their Statues. They made a *Lustration* for Children the eighth Day after their Birth. When a Man who had been falsely reputed dead, returned home, he was not to enter his House by the Door. It was a settled Custom to offer no Expiation for those who were hanged by Order of Justice; or that were killed by Thunder. Neither did they offer any for those who were drowned in the Sea; it being the common Opinion, that their Souls perished with their Bodies: And hence it was, that Persons, in Danger of Shipwreck, sometimes thrust their Sword through their Bodies, that they might not die in the Sea; where they thought their Soul, which they supposed to be a Flame, would be totally extinguished.

The most celebrated expiatory Sacrifice, was the Hecatomb, where they offer'd a hundred Beasts; tho' they commonly did not offer so many, but contented themselves with killing twenty-five; but those being Quadrupedes, their Feet came to an hundred.

Note, That *Hecatomb* (from the Greek *ἑκατόμβη*, which properly signifies a sumptuous, or magnificent Sacrifice) was a Sacrifice of an hundred Beasts of the same Kind, at an hundred Altars, and by an hundred Priests, or Sacrificers. *Pythagoras* is said to have sacrificed a *Hecatomb* to the Muses, of an hundred Oxen, in Joy and Gratitude for his discovering the Demonstration of the 47th Proposition of the first Book of *Euclid*, *viz.* that in a rectangled Triangle, the Square of the Hypothenuse is equal to the Square of the two other Sides. For the Origin of *Hecatombs*,

Hecatombs, *Strabo* relates, that there were an hundred Cities in *Laconia*; and that each City used to sacrifice a Bullock every Year, for the common Safety of the Country; whence the Institution of the celebrated Sacrifice of an hundred Victims, call'd *Hecatombs*. Others refer the Origin of *Hecatombs* to a Plague, wherewith the hundred Cities of *Peloponnesus* were afflicted; for the Removal whereof, they jointly contributed to so splendid a Sacrifice. *Ælius Capitolinus* relates, that for a *Hecatomb* they erected a hundred Altars of Turf, and on these sacrificed a hundred Sheep, and a hundred Hogs. He adds, that when the Emperors offered Sacrifices of this Kind, they sacrificed a hundred Lions, a hundred Eagles, and a hundred other Beasts of the like Kind.

Lustrations, and lustratory Sacrifices, were not only performed for Men, but also for Temples, Altars, Theatres, Trees, Fountains, Rivers, Sheep, Fields, and Villages. Cities were all to be purified from Time to Time: Some walked the Victim round their Walls, and then slew him. The *Athenians* sacrificed two Men, one for the Men of their City, and the other for the Women. The *Corinthians* sacrificed thus the Children of *Medea*; though the Poets say, *Medea* killed them herself. The *Romans* performed the Ceremony of purifying their City every fifth Year; whence the Name of *Lustrum*, given to the Space of five Years.

Divers of the Expiations were austere: Some fasted; others abstained from all sensual Pleasures: Some, as the Priests of *Cybele*, castrated themselves; others, that they might live chaste, eat Rue, or lay under the Branches of a Shrub call'd *Agnus Castus*. The Postures of the Penitents were different, according to the different Sacrifices: They sometimes joyned Prayers to the Solemnity; at other Times a publick Confession of Sins was made. The *Indians*, when they sacrificed to *Hercules*, call him a thousand reproachful Names; and think they incur his Anger, if any respectful Term comes out of their Mouths.

The Priests changed their Habits, according to the Ceremony to be perform'd; white, purple, and black, were the most usual Colours. They had their Heads always covered, and long Hairs, except in the Sacrifices of *Saturn*, *Hercules*, *Honour*, and few others: Only the Priests of *Isis* were shaven, because that Goddess underwent the same Operation, after the Death of her Husband *Osiris*. In some Ceremonies the Priests were shod, in others barefoot: The Poets express the former by the Word *vincula*. They had no Girdles; nay, they durst not pronounce the Word *Ivy*, because Ivy cleaves to every Thing. In the Sacrifices of *Venus*, and the *Moon*, every one took the Habit of the contrary Sex. Every Thing was to be done by odd Numbers; because they look'd on an even Number, which may be equally divided, as the Symbol of Mortality and Destruction: The odd Number was with them holy: Hence *Neptune's* Trident, *Cerberus's* three Heads, and *Jupiter's* Thunder-Dart, with three Points.

They cast into the River, or at least out of the City, the Animals or other Things that had served for a *Lustration*, or Sacrifice of Atonement; and thought themselves threatened with some great Misfortune, when by Chance they trod upon them. At *Marseilles*, they took Care to feed a poor Man for some Time; after which they charged him with all the Sins of the Country, and drove him away: Those of *Leucade*, fastened a Number of Birds to a Man charged with their Sins, and in that Condition cast him headlong from a high Tower; and if the Birds hinder'd his being kill'd, they drove him out of the Country.

Part of these Ceremonies were abolished by the Emperor *Constantine*, and his Successors; the rest subsisted till the *Gotick* Kings were Masters of *Rome*, under whom they expired.

Note, That the Day whercon the *Lustrations* were performed for a Child, and his Name given, was call'd *Lustral*; which was usually the ninth Day from the Birth of a Boy, and the eighth from that of a Girl: Though others performed the Ceremony on the last Day of that Week wherein the Child was born; and others on the fifth Day from his Birth. Over this *Feast* Day, the Goddess *Nundina* was supposed to preside; the Midwives, Nurses, and Domesticks, handed the Child backwards and forwards, around a Fire, burning on the Altars of the Gods, after which they sprinkled it with Water: The whole ended with a sumptuous Entertainment.

Note, also, That Water used in these Ceremonies and others, was called *Lustral*.

The *Romans* had also a Ceremony, or Sacrifice, called *Lustrum*; celebrated after numbering their People once in five Years.

The *Games*, used by the Antients in the Celebration of their *Feasts*, were the *Ludi Cereales*, *Florales*, *Martiales*, *Apollinares*, *Megalenses*, *Romani Consuales*, or *Circences*, *Capitolini*, *Seculares*, *Plebeii*, *Compitalitii*, *Augustules*, *Palatini*, *Votivi*.

As we have already took Notice of the *Cereales*, and *Florales* Games; we'll begin here by the Description of the *Martiales*, which were Combats instituted in honour of the God *Mars*. They were held twice in the Year; once in the Circus, on the Fourth of the Ides of *May*; and a second Time on the First of *August*. These latter were established sometime after the other, in Memory of the Dedication of the Temple of *Mars* on that Day. These *Games* consisted in Courses of Horses, and Combats with wild Beasts. *Germanicus* is said to have kill'd two hundred Lions in the Circus on these Occasions.

The *APOLLINARES Ludi*, were Games at *Rome*, celebrated yearly, in honour of *Apollo*, on the fifth Day of *July*, under the Direction of the Prætor, in the *Circus maximus*. The Tradition goes, that at the first Celebration thereof, the People were suddenly invaded by the Enemy, and obliged to take to their Arms: Upon which Occasion, a Cloud of Darts and Arrows falling upon their Enemies, the *Romans* soon returned Victors to their Sports.

The *MEGALENSES Ludi*, (from the Greek *μεγαλη*, great) were Games celebrated among the *Romans* on the Twelfth of *April*, in honour of *Cybele*, or *Rhea*, Mother of the Gods; wherein were Sports or Combats held before the Temple of that Goddess.

The *ROMAN Games*, or *Ludi Romani*, were solemn Games, held in ancient *Rome*; thus called by Way of Eminence, and on account of their Antiquity, as having been instituted by *Romulus*. They were sometimes, also, call'd *magni Ludi*; from the great Pomp and Expence thereof: Sometimes *Consualia*, because performed in honour of the God *Neptune*, who was also call'd *Consus*, in his quality of God of secret Councils. They also bore the Denomination of *Ludi Circenses*, because held in the Circus. This Solemnity, *Halicarnassens* observes, was originally instituted by *Evander*, in honour of *Neptune*, under the Name of *Ἰππικός*; whence the Festival itself was call'd *Ἰππιοκρατία*; and was afterwards renew'd by *Romulus*, in honour of the same Deity, only under another Name. For *Romulus*, needing the Advice of a God to counsel him in the Design he had to furnish his new Citizens with Wives, applied to the God of secret Councils himself; *Consus* proclaimed the *Consualia*, and invited his Neighbours all around to the Celebration thereof. The great Ceremony in these Games consisted in a Cavalcade of Horses and Asses adorned with Garlands: *Neptune* being reputed the first Inventor of riding on Horseback. Their Horses here were of two Kinds, *viz.* *πομπικοί*, or such as were merely led up and down for State; and *δρομικοί*, which were for Race and Exercise: The other Diversions were Fencing, and that till one of the Combatants were killed on the Spot.

Spot; Fighting with Beasts, and *Cæstus*, or Whirlbats; Wrestling, Running, Leaping, Sea-Fights, Horse-Races, Chariot-Races, &c. These Games, *Livy* tells us, were improved, and render'd much more magnificent by *Tarquinius Priscus*. *Manutius* says, they were held on the Eve of the Nones of *September*, i. e. on the fourteenth Day of the Month.

The *CAPITOLINE Games*, *Ludi Capitolini*, were annual Games, or Combats, instituted by *Camillus*, in honour of *Jupiter Capitolinus*; and in Commemoration of the Capitol's not being surprized by the *Gauls*. *Plutarch* tells us, that a Part of the Ceremony consisted in the publick Cryers putting up the *Lustrations* to Sale by Auction. They also took an old Man, tying a golden Bull to his Neck, such as were wore by their Children, and exposed him to the publick Derision. *Festus* says, they dressed him in a Pretext, and hung a Bull at his Neck, not accounting him as a Child, but because this was an Ornament of the Kings of *Hebruria*.

There was also another Kind of *Capitoline Games*, called *Agones Capitolini*, instituted by *Domitian*, and celebrated each five Years; wherein there were Rewards and Crowns bestowed on the victorious Poets, and put on their Heads by the Emperor himself. These Games became so celebrated, that the Manner of accounting Time by *Lustres*, which had obtained till then, was changed; and they began to count by *Capitoline Games*, as the *Greeks* by *Olympiads*. The Feast was not for Poets alone, but also for *Athleta*, Orators, Historians, Comedians, Musicians, &c.

The *SECULAR GAMES*, *Ludi Seculares*, were held by the *Romans* once in an Age, or in a Period deemed the Extent of the longest Life of Man, called by the *Greeks*, αἰών, and by the *Latins*, *Seculum*. The *Secular Games* were also *Terentine Games*, *Ludi Terentini*, either by reason *Manius Valerius Terentinus* gave Occasion to their Institution; for that having been warned in a Dream to dig in the Ground, in a Place near the *Campus Martius*, called *Terentum*; he there found an Altar inscribed to *Diis*, or *Pluto*, and *Proserpine*: Upon which, as had been foretold him in his Dream, three of his Children born blind, recovered their Sight; and he, in Gratitude, performed Sacrifices on the same Altar for three Days and three Nights successively.— Or by reason here was an Altar of *Pluto* buried deep under Ground, because the Water of the *Tyber*, *Terram tereret*, eat into the Ground in this Place. The *Secular Games* lasted three Days, and as many Nights; during which Sacrifices were performed, theatrical Shews exhibited, with Combats, Sports, &c. in the Circus. Their Origin and Institution is delivered at length, by *Valerius Maximus*: The Occasion whereof, according to this Writer, was to stop the Progress of a Plague. The first who had them celebrated at *Rome*, was *Valerius Publicola*, the first Consul created after the Expulsion of the Kings, in the Year of *Rome* 245; the Ceremonies to be observed therein were found prescribed in one of the Books of the *Sibyls*. At the Time of their Celebration, *Heralds* were sent to invite all the World to a Solemnity no Body had ever yet seen, nor was ever to see again.

Authors are not agreed as to the Number of Years wherein these Games returned, partly because the Quantity of an Age or *Seculum*, among the Antients, is not known; and partly on other Accounts: Some will have it that they were held once every hundred Years, and that the *Seculum* or Age was our Century. This *Varro* and *Livy* seem to express in very plain Terms; yet others will have it that *Seculum* comprehended 110 Years, and that the *Secular Games* only returned in that Period, that is, at the Beginning of every 111th Year; which Opinion is countenanced by *Horace*, in his *Secular Poem*, v. 20. Be this as it will, it is certain they sometimes did not stay for the 111th Year, nor even for the 100th Year, for the Celebration of these Games. *Augustus*, for Instance, held them in the Year of *Rome* 736; and *Caligula* again in the Year of *Rome* 800, and of *Christ* 38, viz. 64

Years after the former; and *Domitian* again in still less Time, viz. in the Year of *Christ* 87, at which *Tacitus* assisted in quality of *Quindecimvir*, as he himself tells us, *Annal. lib. xi. c. 11*. This was the seventh Time that *Rome* had seen them from their first Institution. The Emperor *Severus* exhibited them the eighth Time, 110 Years after those of *Domitian*: *Zozimus* says these were the last; but he is mistaken, for in the Year of *Rome* 1000, fifty Years after those of *Severus*, the Emperor *Philip* had them celebrated with greater Magnificence than had ever been known. We find them represented on Medals.

The *AUGUSTALES Ludi*, were Games celebrated in honour of *Augustus*, during the Feast first instituted in his Honour in the Year of *Rome* 835, being the fourth Year after he had ended all his Wars, and settled the Affairs of *Sicily*, *Greece*, *Asia*, *Syria*, and the *Parthians*. The Day whereon he made his Entrance into *Rome*, being the fourth of the Ides of *October*, was appointed to keep that Feast, called from his Name *Augustalis*.

The *PALATINE Games* were instituted in honour of *Julius Cæsar*, as some will have it, or as others, of *Augustus*. It is pretended, that *Dion* calls them *Augustalia*; which should seem to confirm the second Sentiment. Indeed it is certain that he says *Livia* instituted particular Games on the *Palatine Mount*, in honour of that Prince; but he apparently distinguishes them from those called *Augustalia*. The *Romans* had also their *Apollo Palatinus*, a Sirname of that Deity, given him in respect of the Temple erected to him by *Augustus* on the *Palatine Mount*, in Consequence of a Report of the *Aruspices*, which required it to be done. *Augustus* enriched it with a noble Library; as it is intimated by *Horace*, *Lib. 1. Epist. 3. ver. 17*.

Votivi Ludi, or more properly call'd *Vows*, since they were nothing else but Sacrifices, Offerings, Presents, and Prayers, made for the Emperors and *Cæsars*, particularly for their Prosperity and the Lastingness of their Empire. These were at first made every five Years, then every fifteen, and then every thirty, called *Quinquennialia*, *Decennialia*, and *Vicennialia*.

The *QUINQUENNALIA*, began to be expressed on Medals about the Middle of the third Century. *Father Pagi* produces a Medal, wherein are engraven those of the Emperor *Posthumus*; they are not found in any Medals of his Predecessors. As for the *Vicennialia vota*, we frequently meet with them on Medals. The Vows put up on that for the Safety of the Emperors, and the Enlargement of the Empire.

These are expressed by *VOT. X. & XX.* in the Medals of *Tacitus*, *Gallienus*, and *Probus*. *VOT. X. M. XX.* in those of *Valerius Maximianus*, and *Galerius Maximianus*. *VOT. X. MUL. XX.* in those of *Constantine*, *Valentinian*, and *Valens*. *VOT. MULT. XX.* in those of *Dioclesian*, *Constantine*, *Julian*, *Valentinian*, *Theodosius*, *Arcadius*, *Honorius*. *VOTIS X. MULT. XX.* in those of *Julian*, *Valentinian*, *Gratian*, *VOT. XII. FEL. XX.* in the younger *Licinius*. *VOT. XV. FEL. XX.* in *Constantine*.

Part of the Ceremony of the antient Festivals consisted also in sumptuous Meals, hence they have been called since *Feasts*.

The principal Feasts of the *Jews*, were the Feasts of *Trumpets*, that of the *Expiation*, of *Tabernacles*, of the *Dedication*, of the *Passover*, and of the *Pentecost*.

The Feast of the *EXPIATION*, was held on the 10th Day of the 7th Month of the *Jewish Year*, answering to our *September*: And was instituted by God himself, *Levit. xxiii. 27*, &c. on that Day the High-Priest, the Figure, or Type of *Jesus Christ*, confessed his Sins; and after several Ceremonies, made an Atonement for all the People to wash them from their Sins.

The Feast of the *TABERNACLES*, otherwise called *Senopegia*, was instituted after the People of *Israel* were in Possession of the Land of *Canaan*, in Memory of their having dwelt under Tents in the Wilderness. It was held for eight Days successively, commencing on the fifteenth of *September*. The last Day was much the

the most solemn; both on Account of the Conflux of Persons, and of the extraordinary Tokens they gave of their Joy. It is of this eighth Day St. John must be understood to speak, when he tells us our Saviour was at the *Feast of Tabernacles*, on the last and great Day. When the holy Scripture says absolutely the *Feast*, it is usually to be understood of the *Scenopagia*.

The PASSOVER was a solemn *Feast*, celebrated among the Jews, on the fourteenth Day of the Moon, next after the vernal Equinox. This *Feast* was call'd by the antient Latins and Greeks, *Pascha*; not from *πασχω*, I suffer, as *Lactantius* weakly imagines, but from the Hebrew, *Pesabb*, Passage, Leap; the Design of the *Feast* being to commemorate the destroying Angel passing over the Houses of the Israelites, when he enter'd in and destroy'd the First-Born of the Egyptians: Yet many weakly imagine, that it was in Memory of their passing the Red-Sea, that the *Passover* was instituted; though it is certain the *Feast* was held, and had its Name, before the Israelites took a Step of their Way out of Egypt; and consequently several Days before their passing the Red-Sea. Besides the *Passover* celebrated in the 14th of the first Month; there was a second *Passover*, held on the 14th of the second Month after the Equinox, instituted by God in favour of Travellers, and sick Persons, who could not attend at the first, nor be at Jerusalem on that Day.

The Greeks, and even some Catholick Doctors, from the 18th Chapter of John, take Occasion to conclude, that Jesus anticipated the Day mark'd for the *Passover* in the Law; but the Authority of the three Evangelists, seems to evince the contrary. Father Lamy is of Opinion, he did not attend at the *Passover* the last Year of his Life; which Sentiment has drawn upon it Abundance of Opposers. F. Hardouin maintains, that the Galileans celebrated the *Passover* on one Day, and the Jews on another.

The *Feast* called PENTECOST, or *Quinquagesimus*, was solemnized among the Jews, in Memory of the Law being given to Moses, 50 Days after their Departure out of Egypt.

The *Feast of the DEDICATION*, among the Jews, was the Anniversary of that of their Temple every Year for eight Days. This was first enjoin'd by Judas Maccabeus, and the whole Synagogue, in the Year of the Syro-Macedonian, Æra 148, i. e. 164 Years before Christ.

Feasts among Christians, are either *immoveable*, or *moveable*.

The *immoveable Feasts*, are those constantly celebrated on the same Day of the Year: The principal are Christmas-Day, or the *Nativity*; the *Circumcision*, *Epiphany*, *Candlemas*, or the *Purification*; *Lady-Day*, or the *Annunciation*, called also the *Incarnation*, and *Conception*; *All Saints*, and *All Souls*, besides the Days of the several Apostles, St. Thomas, St. Paul, &c.

The *Feast of the NATIVITY*, commonly called in England, *Christmas*, was first decreed to be held the 25th of December (according to some) by Pope Telephorus, in the Year of Christ, 146. John, Archbishop of Nice, in an Epistle upon the Nativity of Jesus Christ, relates, that at the Instance of St. Cyril of Jerusalem, Pope Julius procured a strict Enquiry to be made into the Day of our Saviour's Nativity, which being found to be on the 25th of December, they began to thenceforth celebrate the *Feast* on that Day.

The CIRCUMCISION, is a *Feast* celebrated on the first of January, in Commemoration of the Circumcision of our Saviour. This Day was antiently kept a Fast, in Opposition to the Pagan Superstitions, who feasted on it in honour of the God Janus.

The EPIPHANY, is the *Feast of Kings*, a double Festival of the first Rank, solemnized on the sixth of January, in honour of the Manifestation of Jesus Christ to the three Kings, or Magi, who came to adore and bring him Presents. This *Feast* had, at its first Institution among the Greeks, a different Object, viz. our Saviour's Birth, and was called *Theophany*, or *Epi-*

phany, that is, *Manifestation*. Pope Julius, who reigned from the Year 337, to 352, was the first who taught the Church to distinguish the *Feast of the Nativity*, and *Epiphany*. The Word in the original Greek, *Επιφάνια*, signifies *Apparition*, and was applied, as some Criticks will have it, to this *Feast*, on Account of the Star which appear'd to the Magi.

St. Jerom, and St. Chrysostom, take the *Epiphany* for the Day of Saviour's Baptism, when he was declared to Men by the Voice, *Hic est filius meus dilectus in quo mihi complacui*, This is my beloved Son, in whom I am well pleased. And accordingly it is still observ'd by the Coptæ, and Ethiopians, in that View. Others contend that the *Feast of Christmas*, or the *Nativity* of our Saviour, was held in divers Churches on this Day; which had the Denomination *Epiphany*, or Appearance, by Reason of our Saviour's first Appearance on Earth at that Time. And it must be allowed that the Word was used among the antient Greek Fathers; not for the Appearance of the Star to the Magi, but for that of our Saviour to the World. In which Sense St. Paul uses the Word *Epiphania*, in his second Epistle to Timothy, i. 10. Add, that the Armenians to this Day, celebrate the *Feast of the Nativity*, on the Day of *Epiphany*. Ammianus Marcellinus makes Mention of this *Feast*, Lib. 21. c. 2. and observes, that it was held in January. Upon which Passage, Valesius in his Notes endeavours to shew, that the Historian meant by *Epiphany*, the *Feast of the Nativity*. The Heathen Writers used the Word *Epiphania* in the like Sense, viz. to express the Appearance of their Gods on Earth. And the Christians, after their Example, applied it in general, to express any Appearance or Manifestation of the Deity.

CANDLEMAS, is a *Feast* held on the second of February, in honour of the Purification of the Blessed Virgin. This *Feast* is also called by antient Writers, *Hypapante*; and among moderns, the *Purification*. Some will have this *Feast* to have been instituted by Pope Gelasius, in lieu of the Heathen *Lupercalia*; and that Procession was thereon made with lighted Candles, round the Fields and Grounds by Way of Exorcism. Hence Bede says, 'It is happy for the Church to have changed the Lustrations of the Heathens, held in the Month of February around the Fields, for the Processions with hallowed Candles, in Remembrance of the divine Light wherewith Christ illuminated the World. Whence he was stiled by Simon, *A Light to lighten the Gentiles*.' Others ascribe the Origin of *Candlemas*, to Pope Vigilius, in the Year 536; and suppose it substituted in the Room of the *Feast of Proserpine*, held with burning Tapers by the Heathens, in the Beginning of February.

LADY-DAY, or the ANNUNCIATION, is a *Feast* celebrated annually on the 25th of March, in Commemoration of the Mystery of the Incarnation of the Word. The Greeks call it *Ευαγγελισμος*, glad Tidings; and *Χαιρετισμος*, Salutation.

This *Feast* appears to be of great Antiquity in the Latin Church; among the Sermons of St. Augustin, who died in 430, we have two on the *Annunciation*, viz. the 17th and 18th *De sanctis*: And yet there are more early Testimonies of its Use in the Greek Church. Proclus, who died in 446; Chrysostom, in 407; and even Gregory Thaumaturgus, in 295; have all of them Discourses on the *Annunciation*.

Several of the Eastern Churches, celebrate the *Annunciation* at a different Season from those of the West. The Syrians call it *Bascarah*, q. d. Search, Enquiry; and mark it in their Calendar for the first Day of December; the Armenians hold it on the fifth of January; thus anticipating the Time, to prevent its falling in Lent.

The *moveable Feasts*, are those which are not confin'd to the same Day of the Year. Of these the principal is *Easter*, which gives Law to all the rest, all of them following and keeping their proper Distance therefrom: Such are *Palm-Sunday*, *Good-Friday*, *Asb-Wednesday*, *Sexagesima*, *Ascension-Day*, *Pentecost*, and *Trinity-Sunday*.

EASTER, is a Feast of the Church, held in Memory of our Saviour's Resurrection, the *Greeks* and *Latins* call it *Πασχα*, *Pascha*; originally a *Hebrew* Word, signifying *Passage*; applied to the Feast of the *Passover*, which is held among the *Jews*, much about the same Time. In *English* it is called *Easter*; from the *Saxon*, *Eaſter*, a Goddess worshipp'd with peculiar Ceremony in the Month of *April*. The Rule for the Celebration of *Easter*, fixed by the Council of *Nice*, in the Year 325, is, that it be held on the *Sunday* which falls upon, or next after the Full-Moon, next after the 21st of *March*, i. e. the *Sunday* which falls upon, or next after the first Full-Moon, after the vernal Equinox. The Reason of which Decree was, that the *Christians* might avoid the celebrating their *Easter*, at the same Time with the *Jewish* Passover, which, according to the Institution of *Moses*, was held the very Day of the full Moon.

PALM-SUNDAY, *Dominica Palmatum*, is the *Sunday* next before *Easter-Day*, or the last *Sunday* in *Lent*. It has been thus called from the primitive Days, on Account of a pious Ceremony then in Use, of bearing Palms, in Memory of the triumphant Entry of *Jesus Christ* into *Jerusalem*, eight Days before the Feast of the *Passover*, describ'd by *St. Matthew*, xxi. *St. Mark*, xi. *St. Luke*, xix.

The Antients had other Names for this Day, for 1. They call'd it *Dominica Competentium*, i. e. *Sunday* of the *Competentes*; because on that Day, the Catechumens came to ask the Bishop's Leave to be admitted to Baptism, which was conferr'd the *Saturday* following. They had also, then, given them the Symbol, or *Credo*, to get off by Heart, to be repeated to the Bishop in the Ceremony of Baptism. They call'd it *Capitulum*, the *Sunday* of washing the Head; by Reason, those who were to be baptized the following *Saturday*, were prepared by washing their Heads on this Day. Some Time afterwards they call it *Indulgence Sunday*, by Reason the Emperors and Patriarchs used to distribute Gifts on that Day.

ASH-WEDNESDAY, is the first Day of *Lent*, so called from a Custom in the Church, of sprinkling Ashes that Day, on the Heads of Penitents then admitted to Penance.

ASCENSION-DAY, popularly called *Holy Thursday*, is a Feast of the Church, held ten Days before Pentecost, in Memory of our Saviour's *Ascension*.

The PENTECOST, (from the *Greek* *πενήκοντος*, q. d. *Quinquagesimus*, 50th, because held on the fiftieth Day after *Easter*) is a solemn Feast of the Church, held in Commemoration of the Descent of the Holy Ghost on the Apostles, as describ'd in the *Acts*. In the antient Church, *Pentecost* finished the Paschal Time, or *Easter* Season; wherein, as *Tertullian*, *St. Jerome*, &c. observe, Hallelujah was sang every where, the Office celebrated standing, no Fasting allow'd, &c.

Note, That antiently there were pious Oblations made at the Feast of *Pentecost*, by the Parishioners to their Parish Priest, called *Pentecostals*, *Pentecostalia*; and sometimes by inferior Churches or Parishes, to the Principal, or Mother Church; these Parish *Pentecostals*, were also called *Whitson-Farthings*, and their Sum was divided into four Parts, of which one went to the Priest, one to the Poor, one towards the Repair of the Church, and one to the Bishop of the Diocese.

TRINITY-SUNDAY, is the next *Sunday* after Pentecost; thus called, because on that Day was antiently held (as it still continues to be in the Catholick Church) a Festival in honour of the holy Trinity. The

Observation of this Festival, was first enjoind by the Council of *Arles*, in 1260.

Besides these *Feasts*, which are general, and enjoined by the Church, there are others, *local* and *occasional*, enjoind by the Magistrate, or voluntarily set on Foot by the People; such are the Thanksgivings for Delivery from Wars, Plagues, &c. such also are the Vigils, or Wakes, in Commemoration of the Dedication of particular Churches.

VIGIL, or *Eve*, is the Day before any *Feast*, &c. for tho' the civil Day begins at Midnight, yet the ecclesiastical, or scriptural Day, begins at Six o'Clock in the Evening, and holds till Six in the Evening the ensuing Day. Hence the Collect for every *Sunday* and Holiday, by Order of the Church, is to be read at the preceding Evening-Service, at Six o'Clock the Day before; from which Time the religious Day was supposed to begin. And this first Part of the Holiday, from Six o'Clock the Day before, was, by the primitive Christians, spent in Hymns, and other Devotions; and being often continued till late at Night, was call'd *Vigil*. These *Vigils* came by Degrees to be so enlarged, that, at last, all the Day, preceding the Holiday, was called by the Name.

The Origin of *Vigils*, is deduced by *Forbes* from a Custom in the antient Church, for the People, both Men and Women, to meet together in the Evening before *Easter-Day*, and watch and pray, as expecting the Coming of our Lord, who was to rise early in the Morning. This Practice, *Tertullian* observes, *ad uxorem*, afterwards got to other *Feasts* and Saints-Days. But Abuses creeping in, they were forbid by a Council, in 1322, and in lieu thereof, Fastings were instituted on the Day before, tho' still called by the Name of *Vigil*.

WAKES, are certain antient Anniversary *Feasts*, in several Parishes of *England*; wherein the People were to be awake at the several *Vigils*, or Hours, to go to Prayer. They are usually observ'd in the Country, on the *Sunday* next after the Saint's-Day, to whom the Parish Church is dedicated. *Cowel* defines them by *Vigils*, in the Dedications of Churches.

The *Mahometans* have two principal annual *Feasts*, viz. the great and little *Bairam*, which *Scaliger*, *Erasmus*, *Rycaut*, *Hide*, *Chardin*, *Bobovius*, and other *European* Writers, commonly interchange, giving the Appellation *great*, to that which the *Turks* call *little*; and *vice versa*. The little *Bairam* holds for three Days, during which no Work is done; but Presents pass from one to another with many Manifestations of Joy. If the Day after *Ramezan* should prove so cloudy as to prevent the Sight of the New-Moon, *Bairam* is put off to the next Day, when it begins though the Moon be still obscured. When they celebrate this *Feast*, after numerous Ceremonies, or rather strange Mimickries, in their Mosque, they end it with a solemn Prayer against the Infidels, to root out Christian Princes, or to arm them one against another, that they may have an Opportunity to extend the Borders of their Law.

Note, That the *Ramezan*, or *Ramadan*, is a Sort of *Lent* observ'd by the *Mahometans*; during which they fast the whole Day with such extreme Superstition, that they do not wash their Mouths, nor even swallow their Spittle. The Men indeed are allow'd to bathe themselves; but it is on Condition they do not plunge the Head under Water, lest some Drops enter by the Mouth or Ears, &c. But for the Women they are strictly forbid Bathing, for fear of taking in Water at the *Pudendum*. To make amends, they feast all Night, and usually spend more this Month than in six others.

F I S H I N G.

FISHING is the Act; or Art of catching Fish.

The Art of *Fishing* has for its Object all Sorts of Fish indifferently, either Salt-Water or Fresh-Water Fish; and is practised, in a different Manner, according to the different Sorts of Fish; for if the Fish is supposed to go in Shoals, a Net is used; and the Hook, or Harping, &c. for solitary Fish, according to the Size of the Fish.

As *Fishing* in Salt-water (commonly called *Fishery*) is the most beneficial to the Common-Wealth, we'll apply ourselves first to that Branch of *Fishing*, reserving the *fishing* in Fresh-water, for a kind of Recreation, after our Fatigues on that tempestuous Element, the Sea; where we do not design to expose ourselves, only for catching all Sorts of Fish indifferently that comes to our Net, to supply daily the several Markets of a City or Town; but for those Kind of *Fishing*, which are far more lucrative, and more taken Notice of, as having their proper Seasons, Places, Baits, and Manner of Application; such as that practised for Whales, Herrings, Cod, Salmon, Mackarel, Pilchards, Sturgeon, Pearls, &c.

But as I may be reasonably supposed to carry along with me several Persons, who perhaps have never made any long Voyage by Sea, and even some who have never seen it; it would be a Sort of Imprudence in me to venture too far from the Land for the first Time: Therefore we'll begin by *fishing* Herrings, since this is one of the Seasons when they begin to visit the *English* Coasts.

To fit ourselves for this Employment, we must provide a Boat and a Net, which must have its Meshes an Inch Square, that none of the lesser Fry may be taken.

Herring, is a small Salt-Water Fish, with a bluish Back, and a white silver'd Belly, not unlike the little Shad Fish, chiefly found in the North-Sea: It is true that they are found elsewhere, but not in so great a Quantity; and on the Coast of *Brittany*, where all Sorts of other Fish abound; the *Herring* is but very seldom found among them.

There are usually two *Fishing* Seasons for Herrings; the first in *June*, *July*, and *August*; the second in Autumn: The latter of which is the more considerable on account of the Fogs, which are very favourable to this Kind of *Fishing*.

The *Herrings* go chiefly in Shoals, are fond of following Fire and Light; and in their Passage resemble a Kind of Lightning themselves. The Manner of *Fishing* them has nothing particular in it; but as they are a Fish of Passage, 'tis allow'd to catch them on Holidays and Sundays.

The only Thing worthy our Observation in the *Herring-Fishery*, is the Method of Curing and Preparing them, either for *white* or *pickled Herring*, or for *red Herring*.

For *white Herring*, as soon as they are taken out of the Sea (from whence it is commonly said that they never come out alive) one of the Crew appointed for this Office cuts them open, and takes out the Guts, and every Thing but the Milts and Roes, which are always to be left in the Body of the Fish. Then washing them in fresh Water, they are left the Space of twelve or fifteen Hours in a Tub full of strong Brine, made of fresh Water and Sea-Salt. This Time expired, they take them out of the Brine, drain them, and when well drained put them up in Barrels, taking Care to dispose and range them evenly, in Rows or Layers; pressing them well down, and strewing a Layer of Salt both at Top and Bottom. When the Barrel is full, they stop it up very close, that no Air may get in; nor any Brine out; either of which is very prejudicial to the Fish.

The Method of Salting and Barrelling *Herring*, was

not discovered till the Year 1416; though others date it from the Year 1397. *Willoughby*, in his *History of Fishes*, observes, that *Will. Buckeltz*, or *Bacchalen*, a Native of *Bier-uliet*, render'd his Name immortal, by the Discovery of the secret of curing and pickling *Herrings*. He adds, that the Emperor *Charles V.* coming into the *Low-Countries*, made a Journey to the Isle of *Bier-uliet*, with the Queen of *Hungary*, on Purpose to see the Tomb of this first Barreller of *Herrings*.

The *white Herring*, cured by the *Dutch*, are in the greatest Repute, and are distinguished into four Kinds; according to their Sizes. The Goodness of this Commodity consists in its being fat, fleshy, firm, white; salted the same Day it is taken, with good Salt, and well barrell'd. The *Irish Herring* are the next in Value after those of *Holland*; and principally those of *Dublin*, which are scarce inferior to the best *Herring* of *Rotterdam* or *Enkuyzen*. The *Scotch Herring* is not so well prepared, gutted, salted, nor barrell'd, as the *Dutch*; and yet its Taste is excellent: Nor is it doubted, but that if the *Scots* were as careful in these Circumstances as their Neighbours, their *Herring* would be the best in the World. The *Herring* fished in *England* is inconsiderable; the Fish being too dry and fresh for the Market.

For *red Herring*, the Fish being catch'd; they proceed to wash, gut, and lay them in Brine, as for pickled *Herring*; with this single Difference, that they let them lie double the Time in it, *viz.* twenty-four Hours; inasmuch as they are to take all their Salt here, whereas the other Kind takes half its Salt in the Barrel. When the *Herrings* are taken out of the Brine, they spit them, *i. e.* string them by the Head on little wooden Spits, and thus hang them in a Kind of Chimney made for the Purpose; and when the Chimney is as full as it can hold, which less than ten or twelve Thousand seldom effects; they make a little Fire underneath of Brush-Wood, which yields a deal of Smoke, but no Flame. Here the *Herrings* remain, till sufficiently smoaked and dried, which ordinarily is in twenty-four Hours; then they are taken down; and barrell'd up for keeping. Their Goodness consists in their being large, fresh, fat, oily, soft; and pliable; their Outside of a yellow golden Colour; their Roes, or Milt within them; and well salted and barrell'd.

The *Hollanders* (the most industrious People in the whole World to acquire Wealth) were the first who began the *Herring-Fishery*, and observed the several Seasons of their Passage. Their first regular *Fishing* is fixed to the Year 1163. They begin on the 24th of *June*, and employ no less than ten thousand Vessels therein; which Vessels are a Kind of Barks call'd *Busses*, carrying from forty-five to sixty Tuns; and two or three small Cannon. None of them are allowed to stir out of Port without a Convoy; unless there be enough of them together to make eighteen or twenty Pieces of Cannon: In which Case they are allowed to go in Confort or Company: Before they set out they make a verbal Convention; which has the same Force as if it were in Writing. These Regulations of the Admiralty of *Holland* are partly followed by the *French*; and other Nations; and partly improved and augmented with new ones: As that no *Fisher* shall cast his Net within a hundred Fathoms of another Boat: That while the Nets are cast, a Light shall be kept on the hind Part of the Vessel: That when a Boat is by any Accident oblig'd to leave off *Fishing*, the Light shall be cast into the Sea: That when the greater Part of a Fleet leaves off *Fishing*, and cast Anchor, the rest shall do the same.

Note, That it is a popular Error to believe the *Herring* to be the *Halec* of the *Romans*. The *Halec*

was no particular Fish, but a Kind of Sauce, made of any Kind of Salt-Fish. The modern *Herring* seems to have been unknown to the Antients: It is neither the *Halec*, nor *Halex*, nor *Moenis*, nor *Leucomenis*, nor the *Gerres* of *Pliny*.

From the *English* Coasts, we'll venture as far as those of my Country, *Brittany*, and enter the Bay of *Douarneney*, to fish *Pilchard*, though there are some on those of *Cornwall* and *Devonshire*; but not so plentiful as on the Coasts of *Brittany*, from *Belle-Isle* as far as *Brest*. We could find as much on those of *Dalmatia*, and the South of the Island *Issea*; which furnishes all *Greece*, and a great Part of *Italy*, with that Kind of Fish; but it would be venturing too far to no Purpose.

The *Pilchard*, is a small Salt-Water Fish, bigger than the Anchovy, but less than the Herring, which in other Respects it resembles. Its Head is yellow, Belly white, and Back of Sea-green. It is a Fish of Passage, like the Herring and Anchovy, and consequently there is a Season for *Fishing* it, which is from *June* to *September*; at which Time my Countrymen, the *Britons*, employ above three hundred Sloops in that *Fishery*; and make use of the Roes of Cod-Fish, as a Bait; which, thrown into the Sea, makes them rise from the Bottom, and run into the Nets, placed for the Purpose. On the *English* Coasts there are Persons posted ashore, who spying by the Colour of the Water where the Shoals are, make Signs to the Boats, to get among them to cast their Nets. They also, like Herrings, follow the Light; and will gather about a Boat, which bears a Light in the Night-time.

When taken, the Fish are brought to a Warehouse on Shore, where they are laid up in broad Piles, supported by Backs and Sides. As they pile them, they salt them with Bay-Salt; in which lying soaking twenty or thirty Days, they run out a deal of Blood, dirty Pickle, and Bittern; which last draws a deal of the Oil from the Fish, to the great Loss of the Owners. When taken out of the Pile, there remains a deal of Salt, Blood, Scales, &c. at Bottom, which, with fresh Salt, serves for another Pile. They now proceed to wash them in Sea-Water, to clear off the Dirt and Blood; and when dry, put them up in Barrels, and press them hard down, to squeeze out the Oil, which issues away at an Hole in the Bottom of the Cask: And in this State they are fit for Sale or Use; though, according to my Taste, they are then very bad Eating, for they are always intolerably salt and dry: But when fresh, or lightly salted, when they come out of the Boat, and broiled half an Hour or an Hour afterwards, they eat admirably; I mean those taken on the Coasts of *Brittany*; for those taken on the Coast of *England*, though twice as large, have not the same excellent Taste.

From the Coasts of *Brittany*, we'll come back on those of *England*, to fish *Mackarel*, which is a Salt-Water Fish, without Scales; its hardy, round and fleshy, terminating almost in a Point at each Extreme, and of about a Foot long. When in the Water, it appears yellow; and when out of it, of a silver white, excepting for Streaks, or Speckles of a deep blue on the Back and Sides.

The *Mackarel* is also a Fish of Passage, found in large Shoals in divers Parts of the Ocean, but especially on the *French* and *English* Coasts. The *Fishing* is usually in the Months of *April*, *May* and *June*, and even *July*, according to the Place. They enter the *English* Channel in *April*, and proceed up to the Straights of *Dover*, as the Summer advances; so that, by *June*, they are on the Coasts of *Cornwall*, *Suffex*, *Normandy*, *Picardy*, &c. where the *Fishery* is most considerable: They are an excellent Food fresh; and not to be despised, when well prepared, pickled, and put up in Barrels.

This Fish is taken two Ways; either with a Line, or Nets: The latter is the more considerable; and is performed in the Night-time. The Rules observed

in the *Fishing* of *Mackarel*, are much the same as those already mentioned in the *Fishery* of Herrings.

There are two Ways of pickling them: The first is, by opening and gutting them, and filling the Belly with Salt, crammed in as hard as possible with a Stick: Which done they range them in Strata or Rows, at the Bottom of the Vessel, strewing Salt between the Layers. In the second Way, they put them immediately into Tubs full of Brine, made of Fresh-water and Salt; and leave them to steep, till they have imbibed Salt enough to make them keep: After which they are taken out and barrell'd up, taking Care to press them close down.

From the Coast of *England* we'll sail for the *Mediterranean* to fish *Anchovies*, which *Scaliger* describes, as of the Herring Kind, about the Length of a Finger, having a pointed Snout, a wide Mouth, no Teeth, but Gums as rough as a Saw.—Others make the *Anchovy* a sort of Sardine or Pilchard: But others, with better Reason, hold it a peculiar Species, very different from either.

The *Anchovy* is also a Fish of Passage, caught in the Months of *May*, *June* and *July*, on the Coasts of *Catalonia*, *Provence*, &c. at which Season it constantly repairs up the Straights of *Gibraltar* into the *Mediterranean*. The *Fishing* is chiefly in the Night-time; when a Light being put on the Stern of their little *Fishing* Vessels, the *Anchovies* flock round, and are caught in the Nets. When the *Fishery* is over, they cut off their Heads, take out the Gall and the Guts; then lay them in Barrels and salt them.

From the *Mediterranean* we'll sail for *Newfoundland*, at the Beginning of *February*, when the Season begins for *Fishing* Cod, in those Seas, as well as on the Coasts of *Canada*, &c.

The *Cod* is a Fish of Passage, pretty large, with a frightful Head, Teeth in the Bottom of the Throat; its Flesh white, its Skin brownish on the Back, white under the Belly, and covered with thin transparent Scales. *Cods* taken on our Coasts, in *Europe*, are commonly eaten fresh; but those taken on those of *Newfoundland*, *Canada*, &c. are salted, and are of two Kinds; the one call'd *green* or *white*, and the other *dried* or *cured*; though it is all the same Fish, only differently prepared.

The chief *Fisheries* for *green* Cod, are in the Bay of *Canada*, on the great and little Bank near the Coast of *Newfoundland*, the Island of *St. Peter*, and the Isle of *Sable*; and hither Vessels are yearly sent from divers Parts, both of *America* and *Europe*. The Vessels used herein, are from a hundred to a hundred and fifty Tons; which will bring thirty or thirty-five thousand Fish apiece. The best, largest, and fattest *Cods*, are those taken on the South-side of the great Bank; which is a Kind of submarine Mountain, one hundred and fifty Leagues long, and fifty broad, and at the Distance of twenty-five from *Newfoundland*: Those on the North-side are much smaller.

The most essential Article in this *Fishery*, are three Persons, who know how to open the Fish, to cut off the Heads, and to salt them; all three known on board a *French* Ship by the three different Names of *Habilleur*, *Decoleur*, and *Saleur*; but on the Ability of the *Saleur*, or Salter, depends the Success of the Voyage, since the Fish cannot keep, unless it be well salted, which is done on board: For the Head being cut off, the Belly open, and the Guts out, the Salter ranges them in the Bottom of the Vessel, Head to Tail; and having thus made a Layer thereof, a Fathom or two square, covers it with Salt: Over this he lays another, which he covers as before; and thus he disposes all the Fish of that Day, taking Care never to mix the Fish of different Days together. By that Time the *Cod* has lain thus to drain three or four Days, they are moved into another Part of the Vessel, and salted afresh; after this they are no more to be touched, till the Vessel have its Burden. Sometimes they put them up in Barrels, for the Convenience of Carriage.

Those caught from *March* to *June*, keep well enough;

enough; but those in *July*, *August*, and *September*, soon spoil.

Fishing is sometimes done in a Month or six Weeks; sometimes it holds six Months, as *Lent* draws on: If the Fishermen have but half their Cargo, they strive to make Homeward the first; the Market being then the best. Some will make a second Voyage, before others have got Loading for the first. Each Fisher takes only one *Cod* at a Time, and yet the more experienced, will take from three hundred and fifty, to four hundred *per Day*; but this is the most, for it is very fatiguing Work; both on Account of the Weightiness of the Fish, and of the extreme Cold which reigns on the Bank. The Salary usually allow'd the Captain and Sailors, is one-third of the *Cod* they bring Home sound.

Several Authors will have it, that the *Biscayans* in pursuing their Whales, made the Discovery of the great and little Bank of *Cods*, in *Newfoundland*, *Canada*, &c. a hundred Years before *Columbus's* Time; and that it was a *Biscayan Newfoundland*, that gave the first Intimation thereof to *Columbus*. Others say, that the great Bank was discovered by a Native of *St. Malo's*, nam'd *Chartier*. But be the Inventor of what Name or Nation he will, the Invention is certainly highly valuable; not a trading Nation in *Europe*, but allows the Commerce of *Cod-Fish*, one of the most secure and gainful that is known.

The principal *Fishery* for dry *Cod*, is along the Coast of *Placentia*, from *Cape Rose*, to the *Bay Des Experts*; in which Compass there are divers commodious Ports for the Fish to be dry'd in. The Fish intended for this Use, though of the same Kind with the green *Cod*, is yet much smaller; whence it is the fitter to keep, as the Salt takes more hold.

In this *Fishing*, Vessels of all Sizes are used; tho' such are generally chose, as have large Holds, by Reason this Sort of Fish, incumbers more than it burthens. The Method of *Fishing*, is much the same as that of green *Cod*; only this is the more expensive, as it takes up more Time, and employs more Hands; and yet scarce half so much Salt is spent in this, as in the other. As it is only to be dried by the Sun, the *European* Vessels are obliged to put out in *March*, or *April*, to have the Benefit of the Summer for drying. Indeed the *French* and *English* send Vessels for *Cod* in *June*, and *July*; but those only buy what had been fished by the Inhabitants of the *French* and *English* Colonies of *Newfoundland*, and the neighbouring Parts; in Exchange for which, those *European* Vessels carry them Meal, Brandies, Wine, Biscuits, Pulse, Molasses, Linen, &c.

When several *Fishing* Vessels meet, and intend to fish in the same Port; he whose Shallop first touches Ground, becomes entitled to the Quality and Privileges of Admiral; has the Choice of its Station, and the Refusal of all the Wood on the Coast at his Arrival. As fast as the Captains arrive, they unrig all their Vessels, leaving nothing but the Shrouds to sustain the Masts; and in the mean time, the Mate provides a Tent on Shore, covered with Branches of Fir, and Sails over them; with a Scaffold fifty or sixty Foot long, and one-third as much broad. While the Scaffold is making ready, the Crew are a *Fishing*; and as fast as they catch, they bring their Fish, open them, and salt them on moveable Benches: But the main Salting is perform'd on the Scaffold. When the Fish has taken Salt, they wash them; and to drain them again, lay them in Piles on the Galleries of the Scaffold; when drained, they range them on Hurdles, a Fish thick, Head against Tail, with the Back uppermost; observing, while they lie thus, to turn, and shift them four Times every twenty-four Hours. When they begin to dry, they lay them in Heaps, of ten or twelve a-piece, to retain their Warmth; and continue to enlarge the Heap every Day, till it becomes double its first Bulk: At length they join two of these Heaps into one, which they turn every Day as before. Lastly, they salt them over again, beginning with those that had been salted first; and thus lay them in huge

Piles, as big as Hay-Stacks. And thus they rest till they are carried a Ship-board; where they are laid on Branches of Trees, disposed for that Purpose in the Bottom of the Vessel, with Mats all round; to prevent their contracting any Moisture.

There are four Kinds of Commodities drawn from *Cod*, viz. the Tripes and Tongues; which are salted at the same Time with the Fish, and barrelled up; the Roes or Eggs, which being salted and barrelled up, serve to cast into the Sea to draw Fish together; and particularly Pilchards: And lastly, the Oil; which is used in dressing of Leather, &c.

The *Scots* catch a small Kind of *Cod*, on the Coasts of *Buchan*, which is highly priz'd, tho' very much like Ling. They salt it, and dry it in the Sun upon Rocks, and sometimes in the Chimney; but the greatest Part of it is spent at Home.

At our Return from *Newfoundland*, &c. we'll change Ship, and embark on board of a Fluyts, from two to three hundred Tuns, making our Compliment of thirty-five or forty-one Men, for the *Whale-Fishery*; and setting Sail about the Beginning of *April*, we'll take our Course by the Isles of *Iceland*, from 60 to 61 Degrees of Latitude; after which, leaving them to the West, we'll steer Northward, thro' 73, 74; and 75 Degrees of Latitude, where we'll begin to find the Ice. It is thro' these huge Heaps of Ice, wherewith the whole Quarter is filled, that we'll first begin to spy the *Whales*, and there most of the Vessels fix their Abode for the *Fishing*. But as the Fish are larger and fatter the farther North we go; some Captains will venture as far as 80 or 82 Degrees of North Latitude. Each Vessel of three hundred Tuns, has six Shallops, and each Shallop six Harpineers, with five Seamen to row it. To every Shallop there are seven Lines, of three Inches Circumference; five of them in the Hind-Part of the Vessel, and two before: the hind Lines together make six hundred Fathoms; and with the Addition of the other two, eight hundred and eighty. If the *Whale* dives deeper, or runs further underneath the Ice, the Line must be cut lest the Shallop be drawn after it. The Instrument wherewith the Execution is done, is a Harping-Iron, or Javelin; five or six Foot long, pointed with Steel in a triangular Shape, like the Barb of an Arrow.

The Harpincer upon Sight of the Fish, from one End of the Shallop where he is placed, flings the Harping Iron with all his Might, against the Whale's Back; and if he be so happy as to make it penetrate the Skin and Fat into the Flesh, he lets go a String fastened to the Harping Iron, at the End whereof is a dry Gourd, which swimming on the Water, discovers whereabouts the *Whale* is; which the Minute it is struck, plunges to the Bottom. If it returns to breathe in the Air, the Harpincer takes Occasion to give him a fresh Wound; till Fainting by the Loss of Blood, the Men have an Opportunity of approaching him, and thrusting a long Steel Lance under its Gills into its Breast, and thro' the Intestines, which dispatches him; and when the Carcase begins to float, they cut off the Fins and Tail; and tying a Rope to the Place where the Tail was, swim to the Vessel, where it is taken in. When they have got their Quota of *Whales*, they begin to take the Blubber, or Fat, and the Fins, or *Whale* Bone. In order to this, the *Whale* is hoisted over-board, and kept suspended above the Water by two Ropes, the one tied around his Neck, the other about his Tail; and under the Carcase are two Shallops plac'd to receive what may chance to drop. This done, three or four Men go down upon the *Whale*, with a Kind of Calkers, or Iron on their Feet, to prevent their Slipping. They begin to open him on the Side, and to proceed downwards to the Belly; cutting off all the Lard or Fat, in Pieces of about three Foot broad, and eight long: Besides the Fat on the Sides, they likewise cut off that of the Throat and under Lip, leaving all the Lean behind; they next proceed to the *Whale* Bone, which they cut off with a Hatchet, made for the Purpose, from the upper Jaw of the Fish, and make it up in Packets. The Fat and Bone thus procur'd,

cur'd, what remains of the *Whale* they leave for the Bears, who are very fond of it. In proportion as the large Pieces of Fat are cut off, the rest of the Crew are employ'd in cutting them smaller, and picking out all the Lean. When this is prepar'd, they stow it under the Deck, where it lies till the Fat of all the *Whales* is on board; then cutting it still smaller, they put it up in Tubs, in the Hold, or Bottom of the Vessel, cramming them very full and close. Nothing now remains, but to sail Homewards, where the Fat is to be boil'd, and melted down into Train Oil.

The *Dutch* have upwards of these hundred Years, had the *Whale Fishery* almost to themselves; and is now esteem'd one of the principal Branches of their flourishing Trade. The chief Merchants of the several Provinces associate themselves into a Body, for the carrying it on; and send every Year a great Fleet of Vessels, to the North Seas for that Purpose. They attempted to make their first Establishment in *Greenland*; but not succeeding, they have since fix'd their Fishery about the Western Coast at *Spitzberg*, from the Latitude of 76 Degrees, 40 Minutes, to 80 Degrees.

In 1725, the *English* South-Sea Company, began to share it with them; and by the extraordinary Success they met with in their first Attempt, beyond any of their Neighbours, were induced to persist in it.

After we have unloaded our Fleet, of its Cargo of *Whale* Fat and Bone, we could sail for the *Caspian* Sea, to fish *Sturgeon*; but as that *Fishery* could not prove very beneficial to us, we'll leave it to the *Muscovites*, who find Employment in it for a great Number of Men, who catch them in the Mouth of the *Vog*a, in the *Caspian* Sea, where there is the greatest Fishery in the World for that Kind of Fish, which is a very large one, and which at its Season runs up the Rivers; having a sharp pointed Snout, flat Belly, and bluish Back. There are *Sturgeons* of all Sizes, and we have even read of some twenty Foot long: But the middle Size are reckon'd the best. They are also ranked among the royal Fishes, and when left on Shore belong to the King; but when taken at Sea, are the Property of the Person who takes them.

Sturgeons are not caught in Nets, but in a Kind of Inclosure, form'd by huge Stakes, disposed in Triangles, representing the Letter Z, several Times repeated. These Sort of Fisheries are open on the Side towards the Sea, and close on the other; by which Means, the Fish ascending in its Season up the River, embarrasses itself in these narrow angular Retreats, and not being able to turn itself to go back again, by Reason of its Bulk, is easily struck and kill'd, with a Sort of Harping-Iron.

The chief Object of this Fishery, is the Roe, or Spawn; which is a Commodity as much used in *Muscovy*, as Butter in *Holland*; and there are *Sturgeons* that furnish four hundred Pounds thereof. It is only the lesser and younger *Sturgeon* they pickle for eating; when fresh it eats deliciously.

We have no Need to quit the *English* Coasts to go in Quest of that delicious Fish, *Salmon*; since the chief *Salmon Fisheries* in *Europe*, are along the Coasts of *England*, *Scotland*, and *Ireland*. The *Fishing* usually begins abouts the first of *January*, and ends by the last of *September*; it is performed with Nets, in the Places where the Rivers empty themselves into the Sea; and along the Sea Coasts thereabout. The Fish are seen to crowd thither frequently in Shoals from all Parts in Search of the fresh Water: They also fish for them higher up in the Rivers, sometimes with Nets, and sometimes with a Kind of Locks, or Weirs, made for that Purpose with Iron Grates therein, so disposed, as that the Fish in going up the River, open them with their Head; but are no sooner enter'd, but the Gate claps to. Thus the *Salmons* are inclosed as in a Reservoir, where it is easy taking them. In some Places they fish for *Salmon* in the Night-time, by the Light of Torches, or kindled Straw. The Fishermen watch when the Fish draws towards the Light, whereof he is naturally a great Lover, and

strikes him with a Spear or Lifter. In some Parts of *Scotland*, it is said, they ride a Fishing up the Rivers, and when they spy them in the shallow Parts, shoot them with Fire-Arms.

When the Fish are taken, they open them, take out the Guts and Gills, and salt them in large Tubs for the Purpose; out of which they are not taken before *October*, to be packed up in Casks from three to four hundred and fifty Pounds Weight.

Salmon, is also fished in Rivers, after the Manner of Trout, with a Line and Hook. He bites best in the Afternoon, about three o'Clock; in *May*, *June*, *July*, and *August*, the Water being clear, and a little Breeze of Wind stirring; especially if the Wind and Stream set contrary-wise.

The *Salmon* is caught like a Trout, with Worms, Fly, and Minion; and especially the Garden-Worm, if well scour'd and kept twenty Days in Moss. The *Salmon* nevers stays long in a Place, but is continually shifting to be as near the Spring Head as possible; and swimming generally in the deepest and broadest Parts of the Rivers, near the Ground. Put two or three Garden Worms well-scour'd on your Hook at once, as if you was baiting for Trout, and be sure give him Time to gorge his Bait, before you strike. Some use a Wire Ring on the Top of the Rod, through which the Line may be let run to any Length at Pleasure, by a Reel near at Hand.

Note, That according to some, the *Salmon* breeds in the Sea; but the Opinion of others, seems better warranted, that he breeds in the clear sandy Parts of Rivers, not far from the Mouths thereof. They commonly spawn in *October*, and the young becomes a *Samblet* the following Year, and in a few Months a large *Salmon*. The Milt and Spawner having perform'd their Office, betake themselves to the Sea; and if their Return be prevented by Wars, or the like, they become sick, lean, pine away, and die in two Years Time. If they spawn in the mean Time, the Produce is a diminutive *Salmon*, called *Skegger*, which will never arrive at the natural Bulk; it being the Sea that makes them grow big, and the Rivers fat. The Female is distinguished from the Male, in that its Nose is longer and more hooked, its Scales not so bright, and its Body speckled over with dark-brown Spots; its Belly flatter, and its Flesh not so red; more dry, and less delicious to the Taste. In spawning Time, when they repair from the Sea up to the Rivers, scarce any Thing can stop their Progress. We have seen them leap up Cataracts and Precipices, many Yards high.

PEARLS, (which are a hard, white, shining Body, usually roundish, found in a testaceous Fish, resembling an Oyster) are caught in the Sea of the *East-Indies*, in those of *America*, and in some Parts of *Europe*; and in those different Parts of the World, they have different Manners of *Fishing* for them.

The *Fisheries* for Pearls, in the *East-Indies* are, 1. The Island of *Barben*, or *Boorbaam*, in the *Persian* Gulph. This the *Portuguese* were Masters of, while they held *Ormuz* and *Mascara*; but it has been return'd to the *Sophi* of *Persia*, since the Time that Prince, with the Assistance of the *English*, took from them *Ormuz*; and the *Arabs*, *Mascara*. 2. The Fishery of *Catifa*, on the Coast of *Arabia Felix*, over-against *Babern*. 3. That of *Manar*, a Sea-Port in the Isle of *Ceylon*. The Pearls here fished, are the finest in all the East for their Water and Roundness; but they seldom exceed four Carats. Lastly, there are Pearls fished on the Coast of *Japan*; but they are coarse and irregular, and little minded.

There are two Seasons for *Fishing* Pearls, in the *East-Indies*; the first in *March* and *April*, the second in *August* and *September*; the more Rain falls in the Year, the more plentiful are the Fisheries. In the Opening of the Season, there appear, sometimes, two hundred and fifty Barks on the Banks. In the larger

larger Barks are two Divers, in the smaller, one. Each Bark puts off from Shore e'er Sun-Rise, by a Land-Breeze, which never fails; and returns again by a Sea-Breeze, which succeeds it about Noon. As soon as the Barks are arriv'd, and have cast Anchor, each Diver binds a Stone six Inches thick, and a Foot long under his Body; which is to serve him as a Ballast, and prevent his being driven away by the Motion of the Water; and to enable him to walk more steadily a-cross the Waves. Besides this they tie another very heavy Stone to one Foot, whereby they are sunk to the Bottom of the Sea in a Moment. And as the Oysters are usually strongly fasten'd to the Rocks, they arm their Fingers with leathern Mittens, to prevent their being wounded in scraping them violently off; and some Men carry an Iron Rake for the Purpose. Lastly, each Diver carries down with him a large Net, in Manner of a Sack, ty'd to his Neck by a long Cord, the other End whereof is fastened to the Side of the Bark. The Sack is intended for the Reception of the Oysters gathered from the Rock, and the Cord to pull up the Diver when the Bag is full, or he wants Air. In this Equipage he precipitates himself, sometimes above sixty Foot under Water. As he has no Time to lose there, he is no sooner arriv'd at the Bottom, than he begins to run from Side to Side, sometimes on a Sand, sometimes on a clayey Earth, and sometimes among the Points of Rocks; tearing off the Oysters he meets withal, and cramming them into his Budget. At whatever Depth the Divers be, the Light is so great, that they easily see whatever passes in the Sea, with the same Clearness as on Land. And to their Consternation, they sometimes see monstrous Fishes, from which all their Address in mudding the Water, &c. will not save them, but they become their Prey. And of all the Perils of the Fishery, this is one of the greatest, and most usual.

The best Divers keep under Water for half an Hour, the rest do not stay less than a Quarter. During which Time, they hold their Breath without the Use of Oils, or any other Liquors; when they find themselves straightened, they pull the Rope to which the Bag is fastened, and hold fast by it with both Hands; when the People in the Bark taking the Signal, heave them up into the Air, and unload them of their Fish, which is sometimes five hundred Oysters, sometimes not above fifty. Some of the Divers need a Moment's Respite to recover Breath; others jump in again instantly, continuing this violent Exercise, without Intermission, for many Hours.

On the Shore they unload their Barks, and lay their Oysters in an infinite Number of little Pits, dug four or five Foot square in the Sand; raising Heaps of Sand over them to the Height of a Man, which, at a Distance, look like an Army ranged in Battle. In this Condition, they are left till the Rain, Wind, and Sun, have obliged them to open, which soon kills them. Upon this the Flesh rots and dries, and the Pearls thus disengaged, tumble into the Pit, upon taking the Oysters out.

The *Pearl Fisheries* in the *West-Indies*, are all in the great Gulph of *Mexico*, along the Coasts of *Terra Firma*; and are five in Number, viz. the *Fishery* of *Cubagna*, an Island five Leagues distant from New *Andalusia*, in ten Degrees and a half, North Lat. The Pearls of this *Fishery* seldom exceed 5 Carats, but are found in Abundance; that of the Island *Marguerites*, or *Pearl Island*, which produces the greatest Quantity of Pearls, and the finest, both with Regard to Weight and Water; that of the *Comogete*, near the *Terra Firma*; that of the River *de la Hach*, called *la Rencheria*: And that of *St. Martha*, sixty Leagues from the River *de la Hach*. The Pearls of these three last *Fisheries*, are usually of a good Weight; but ill form'd and of a livid Water.

The Season for *Fishing* in these *Fisheries*, is usually from *October* to *March*. In this Time there set out from *Cartagena* ten or twelve Barks, under the Convoy of a Man of War, called *Larmadilla*, each Bark has two or three Slaves for Divers. Among the

Barks there is one called *Capitana*; to which all the rest are obliged to bring at Night what they have caught in the Day, to prevent Frauds. The Divers never hold long, by Reason of the great Hardship they sustain, continuing sometimes under Water above a Quarter of an Hour. The rest is the same as in the *East-India Fishery*.

Note, That the *Pearl-Fisheries* of *Europe*, are in some Places on the Coasts of *Scotland*, and in a River of *Bavaria*: But the Pearls found here are no Ways comparable to those of the *East-Indies*, or of *America*; though they serve for Necklaces, sold sometimes for a thousand Crowns and upwards.

At present we'll forsake the Sea, and divert ourselves with *Fishing* in Fresh-Water, otherwise call'd *Angling*; providing ourselves, first, with all the Tools or Implements necessary for that Pastime, which an infinite Number of Persons esteem very agreeable and entertaining, as Rods, Lines, Hooks, Floats, Flies, natural and artificial, &c.

We have no Need to give here the Method how to make a *Fishing* Rod, since they may be easily purchased; but we'll inform our *Angler* that to make a Line, after the best Manner, his Hairs ought to be very round, of an equal Bigness, and twisted even, since thereby the Line is strengthened. Afterwards he lays them in Water for a Quarter of an Hour, to find which of the Hairs do shrink, then twist them over again: Some mix Silk in the Twisting, which is never so good as a Line all Hairs, or all Silk. The best Colour for Lines is, the sorrel, white and grey; the two last for clear Waters, and the first for muddy Rivers. In the making your Line, leave a Bow at both Ends, the one to put it to and take it from the Rod, the other to hang your lowest Link upon, to which your Hook is fastened; and so you may change your Hook as often as you please.

The Hook ought to be long in the Shank, somewhat round in its Circumference, the Point standing even and strait; and let the Bending be in the Shank. Strong, but small Silk, is to be used in the setting on of the Hook; and the Hair laid on the Inside of it: For if it was on the Outside, the Silk would fret and cut it asunder.

As for the Floats, there are divers Ways of making them: Some use the *Muscovy* Duck Quills, which are the best for still Waters; but for strong Streams, take good sound Cork, without Flaws or Holes, and bore it through with a hot Iron; then put into it a Quill of a fit Proportion; then pare your Cork into a pyramidical Form, of what Bigness you think fit; after this grind it smooth.

Note, That to plumb your Ground, you must carry with you a Musket-Bullet, with a Hole made thro' it, or any other Sort of Plummets, tying this to a strong Twist, hang it on your Hook, and so you will find the Depth of the Water. And that you may not incommode your Tackle, it will be very requisite to make several Partitions in Pieces of Parchment sewed together, by which each Utensil may have a Place by itself; not forgetting to carry a little Whetstone with you to sharpen your Hooks, if you find them blunt and dull; and having several Bags of divers Sizes for your Hooks, Corks, Silk, Thread, Lead, Flies, &c. Likewise Linnen and Woollen Bags for all sorts of Baits; and a small Pole with a Loop at the End thereof, to which you may fasten a small Net to land great Fish withal.

There are as many different Sorts of *natural Flies*, as there are of Fruits; and they are all good in their Season, for such Fish as rise at the Fly; but some more peculiarly good, as being better beloved by some Sort of Fish; which is easily distinguish'd when coming in the Morning to the River-Side, you beat the Bulches with your Rod, and take up what Variety you

you may of all Sorts of Flies, and try them all, by which Means you will quickly know, which are in the greatest Esteem among them. Not but that they will change their Fly sometimes; but then it is when they have glutted themselves therewith for five or six Days together, which is commonly upon the going out of that Fly: For Fish never covet that Fly more than when there is a great Plenty, contemning them at their first coming in.

There are two Ways to fish with natural Flies, either on the Surface of the Water, or a little underneath it. In Angling for Chevin, Roach, or Dace, move not your natural Fly swiftly, when you see the Fish make at it, but rather let it glide freely towards him with the Stream: But if it be in a still and slow Water, draw the Fly slowly sideways by him, which will make him eagerly pursue it; whereas if you should move it swiftly, they would not follow it, being a lazy Fish, and slow of Motion.

The *artificial Fly* is seldom used but in blustering Weather, when the Waters are so troubled by the Wind, that the natural Fly cannot be seen, nor rest upon them.

Though there are reckon'd no less than twelve Sorts of this artificial Fly, it is much better to find the Fly proper for every Season, and that which the Fish at that Time most eagerly covet, and make one as like it as possible you may, in Colour, Shape and Proportion; and for your better Imitation, lay the natural Fly before you. The making of this artificial Fly, is left to the Ingenuity of every particular Person; which will be very much helped by seeing and observing the Artists Method in their Composition.

The best Rules for artificial Fly-Fishing, are,

1. To fish in a River somewhat disturbed with Rain; or in a cloudy Day, when the Waters are moved by a gentle Breeze; the South-Wind is best; and if the Wind blow high, yet not so but that you may conveniently guard your Tackle, the Fish will rise in plain Deeps; but if the Wind be small, the best Angling is in the swift Streams.

2. Keep as far from the Water-side as may be; fish down with the Stream, with the Sun at your Back, not suffering your Line to touch the Water, but only your Fly.

3. In clear Rivers, ever angle with a small Fly, with slender Wings; but in muddy Places use larger.

4. When after Rain the Water becomes brownish, use a red or orange Fly; in a clear Day, at Night, a colour'd Fly; a dark Fly for dark Waters, &c.

5. Let the Line be twice as long as the Rod, unless the River be encumbered with Wood.

6. For every Sort of Fly have several of the same differing in Colour, to suit with the different Complexions of several Waters and Weathers.

7. Have a nimble Eye, and active Hand, to strike presently with the Rising of the Fish; or else he will be apt to spew out the Hook.

8. Let your Fly fall first into the Water; for if your Line fall first it scares the Fish, and therefore you must draw again and cast.

9. In slow Rivers, or still Places, cast the Fly cross over the River; and let it sink a little in the Water, and draw it gently back with the Current.

Lastly, *Salmon Flies*, should be made with their Wings standing one behind the other, whether two or four. That Fish delights in the gaudiest Colours that can be; chiefly in the Wings, which must be long as well as the Tail.

At present we must examine what Times are proper, and which are not, for Angling.

Calm and clear Weather is very good for Angling; but cool cloudy Weather in Summer is best, provided it be not so boisterous, as that you cannot guide your Tackle; in the hottest Months, the cooler the Weather is the better: And if a sudden violent Shower has disturbed and muddied the River, then is your Time to angle in the Stream at the Ground with a red Worm.

Note, That to fish at the Ground, it must be done

without a Float, and only with a leaden Butler, which must be placed about nine Inches from the baited Hook; the Top very gentle, that the Fish may more easily run away with the Bait, and not be scared with the Stiffness of the Rod. You must not strike as soon as you feel the Fish bite, but slack your Line a little, that he may the better swallow the Bait and Hook. When you strike, do it gently, for the least Matter does it. Though it may be found a better Way to angle without a Float or Lead, only making use of a Garden-Worm, drawing it up and down the Stream; by which you will take more *Trouts* than any other Way, especially if it be in a clear Day. The Morning and Evening is the best Time for the Ground-Line for *Trout*: But if the Day proves cloudy, or the Water muddy, you may angle at Ground all the Day.

A very good Time for Angling, is a little before the Fish spawn; for then their Bellies being full, they come into sandy Fords, and there rub their Bellies to loosen them, at which Time they will bite very freely. If you intend to fish for *Carp* and *Tench*, you must commence your Sport early in the Morning, fishing from Sun-rising till eight of the Clock; and from four in the Afternoon till Night; and in hot Months until it be very late. In the Heat of Summer *Carp* will shew themselves on the very Brim of the Water: At which Time if you fish with a Lob-worm, as you do with a natural Fly, you have excellent Sport, especially if it be among Reeds.

In *March*, *April*, *September*, and all the Winter, (in which Season, Fish swim deep very near the Ground) it is best fishing in a clear serene warm Day, for then they bite fastest: But all the Summer-time, Mornings, Evenings, and cool cloudy Weather, are the best Times for Angling.

Note, That you'll find by Experience that the Fish rise best at the Fly, after a Shower of Rain that has only beaten the Gnats and Flies into the River without muddying them. The proper Months and Times of the Day for the Flies, are *March*, *April*, *May*, and the Beginning of *June*; in which Months let your Time be in the Morning about nine, and between three and four in the Afternoon. A warm Evening is very seasonable if the Gnats play much.

After a clear Moon-night, if the succeeding Day proves cloudy, is a very proper Time for Angling; for the Fish having abstained from Food all the Night (for they will not stir for Fear in bright Nights) the next Day they become hungry and eager, and the Gloominess of the Day makes them bite boldly. At the opening of Sluices or Mill-dams go along with the Course of the Water, and you will find *Trouts*; and other Fish will then come out to seek for what Food the Water brings down with it.

The Seasons which are not proper for Angling, are,

1. The Winter or Spring, when there happens any hoary Frost, because the Fish will not bite kindly all that Day, unless it be in the Morning, when it proves serene and pleasant. When it blows so hard that you cannot manage your Tools, that Time is not proper for Angling.

2. Neither is Sheep-shearing Time a proper one for the Angler; for then the Fish glut themselves with what is washed off the Sheep, and will scarcely bite till that Season be over. Likewise sharp East and North nipping Winds do very much prejudice the Angler's Recreation: Neither is it good to fish immediately after the Spawn-time; for then their Appetite is much abated.

3. In the Excess of Heat, when the Earth is parched with Drought, there is very little Sport to be expected, especially in muddy or clear shallow Rivers.

4. If the preceding Night proves dark and cloudy, the succeeding Day will prove improper for fishing, unless for small Fish; for at such Times the great ones

ones prey abroad for the lesser, who, by Instinct knowing the Danger, hide themselves till the Morning; and having fasted all Night, become then very hungry, whilst the great ones having gorged themselves, lie absconded all the Day long.

Being thus provided with all the necessary Tackle, Tools, &c. for Angling, and having informed ourselves of all we should know to apply ourselves to that Sport, with hope of Success; we'll proceed to put those Rules into Practice, beginning by fishing for *Carp*, which is generally held the Queen of Fresh-Water Fish, is exceedingly subtle, and of all others, the Eel only excepted, lives longest out of Water. Mr. Ray assures us, that in *Holland* they have a speedy Way of fattening them, with white Bread and Milk. They breed several Times in one Year; for which Reason, we seldom meet with Male or Female, without either Milt or Spawn. Their natural Place is, a Pond; in running Waters, they rarely if ever breed; to make them fat and large, it is a good Way, when the Pond is low, in *April*, to rake all the Sides thereof with an Iron Rake, and sow Hay-Seed thereon; by Autumn there will be a Crop of Grass, which coming to be overflow'd, as the Pond rises, will be a fine feeding Place for them.

Much Patience is requir'd to angle for *Carp*, on Account of their incredible Policy; they always chuse to lie in the deepest Places; they seldom bite in cold Weather, and in hot, a Man cannot be too early, or too late for them; when they do bite, there is no Fear of the Hold. The Baits are, the Red-worm, in *March*; the Cadew, in *June*; and the Grasshopper, in *July*, *August*, and *September*. Proper Pastes may also be prepar'd for them; as Honey and Sugar, wrought together, and thrown in Pieces into the Water, some Hours before you begin to angle. Honey, and white Crumbs of Bread mix'd together, do also make a good Paste.

The *Chevin* (which is the next Fish we'll angle for) is a Fresh-Water Fish, with a large Head; it spawns in *March*, and is very strong, though unactive, yielding in a very little Time after he is struck, and the larger he is, the quieter. His Bait is any Kind of Worm, or Fly, particularly the large yellow Moth; also Grain, Cheese, the Pith in the Bone of an Ox's Back, &c. He affects a large Bait, and Variety of them at the same Hook. Early in the Morning, angle for him with Snails; but in the Heat of the Day, chuse some other Bait; and in the Afternoon, fish for him at Ground, or Fly. He will not stick sometimes to snap a *Lamprey*.

We'll fish next for the *Dace*, and *Dare*, which resemble much one another, in Kind, Size, Goodness, Feeding, Cunning, &c. The *Dace*, or *Dare*, will bite at any Fly, but especially the *Stone Cadice Fly*, or *May Fly*, the latter End of *April*, and the Beginning, or most Part in *May*, is a most excellent Bait, floating on the Top of the Water, which they rarely refuse in a warm Day; but when you fish under Water for them, it is best to be within a Handful, or something more of the Ground. To catch *Dace* in Winter, the Bait is a white Worm, with a red Head, as big as the Top of a Man's little Finger, gather'd after the Plough, in Heaths, or sandy Grounds.

Next comes the *Eel*, which is a Fresh-Water Fish, much in the Shape of a Serpent. Naturalists have long been divided as to the Manner how it is produced; whether by Generation, or Corruption, as Worms are; or by certain glutinous Dew Drops, which falling in *May* and *June* on the Banks of some Ponds, and Rivers, are by the Heat of the Sun, turn'd into *Eels*. This is certain, that there is not the least Appearance of Sex or Difference therein. *Abr. Mylius*, in a Treatise of the *Origin of Animals*, describes a Method of producing them by Art; he says, that if you cut up two Turfs, covered with *May Dew*, and lay one on the other, the grassy Side inwards, and thus expose them to the Heat of the Sun, on the Banks of a Water, in a few Hours Time there will spring from them an infinite Quantity of *Eels*.

There are four Kinds of *Eels*, viz. the *Silver Eel*, a *greenish Eel*, called a *Greg*, a *blackish Eel*, with a broad, flat Head, and an *Eel* with reddish Fins.

The *Silver Eel* may be caught with divers Baits; particularly powder'd Beef, Garden Worms, or Lobs; Minnows, Hens Guts, Fish, Garbage, &c. But as they hide themselves in the Mud, without stirring out for six Months; and in the Summer, take no Delight to be abroad in the Day, the most proper Time to take them, is in the Night; by fastening a Line to the Bank-side, with a laying Hook in the Water, or a Line plumb'd with a Float, to discover where the Line lies in the Morning. The Roach does here very well for a Bait, the Hook being laid in his Mouth.

There is another Way of taking *Eels*, called *Snigling*, perform'd in the Day-time; by taking a strong Line and Hook, baited with a Lob, or Garden-Worm; and resorting to such Holes and Places, as *Eels* used to abscond in, near Mills, Wears; or Flood-Gates, where the Bait being gently put into the Hole, by the Help of a cleft Stick, the *Eel* will certainly bite.

Bobbing for Eels, is done after another Manner, viz. by taking very large Lobs, scouring them well, and with a Needle, run some strong twisted Silk through them from End to End; taking so many as may be wrapped a dozen Times round a Board: Then they must be tied fast with the two Ends of the Silk, that they may hang in so many Links. This done, they are to be fastened all to a Cord, and about an Handful and a half above the Worms, a Plummet is fixed, three Quarters of a Pound Weight; and the Cord made fast to a strong Pole. Fishing with these in muddy Water, the *Eels* will bite hastily at the Bait, when you think they have swallow'd it, gently draw up the Line, and bring them ashore as soon as may be.

Others use an *Eel Spear*, with three or four Forks, or jogged Teeth, which they strike at Random into the Mud.

In *April*, *May*, *June*, and *July*, you may fish for *Flounders* all Day long, either in a swift Stream, or in the still deep, with Red-Worms, Wasps, and Gentles.

The *Gudgeon*, which is a small Fish of a delicious Taste, and spawns three or four Times in the Summer Season, feeding in Streams, and on Gravel, is easily taken with a small Red-Worm, fishing near the Ground; and being a leather-mouth'd Fish, will not easily be off the Hook when struck. The *Gudgeon* may either be fished for with a Float, the Hook being on the Ground; or by Hand with a running Line on the Ground, without Cork, or Float. He will bite well at Wasps, Gentles, and Cod-baits; and one may even fish him with two or three Hooks at the same Time, which makes good Sport. When you angle for *Gudgeons*, stir up the Sand or Gravel with a long Pole, which will make them gather to the Place, and bite the faster.

The *Pearch*, or *Perch* (the next Fish which comes to our Hook) is hook-back'd, not unlike a Hog; arm'd with stiff Bristles, and its Sides with dry, thick Scales: He is voracious, and will venture on one of its own Kind, with much more Courage than the Pike itself. He spawns but once a Year, and that is in *February*, or *March*, and seldom grows longer than two Foot. He bites best when the Spring is far spent, at which Time you may take at one Standing, all that are in one Hole. The proper Baits are, the Minnow, and small Frog; but a Worm called a Brandling is best; though the Minnow yields the best Sport, which is to be alive and stuck on the Hook through the upper Lip, or Back-Fin, and kept swimming about Mid-Water, or somewhat lower: For which Purpose, you must have an indifferent large Cork, with a Quill on your Line. When you fish with a Frog, you must fasten the Hook through the Skin of his Leg, towards the upper Part thereof. You may also bait with Lob-Worms well scout'd, Bobs, Oak Worms, Gentles, Colewort Worms, Minnows, Dors, Wasps, and Cad-baits.

baits. When the Fish bites, as he is none of the leathern-mouth'd Kind, he must have Time to pouch his Bait. The best Place to fish for him, is, in the Turning of the Water Eddy, in a good Gravel Bottom. He bites well all the Day long, in cool cloudy Weather; but chiefly from Eight in the Morning till Ten, and from Three in the Afternoon till about Six; but will not bite at all the Seasons of the Year, especially in Winter, for then he is very abstemious; yet if it be warm, he will bite then in the Middle of the Day; for in Winter, all Fish bite best about the Heat of the Day.

When we catch a *Pike*, we catch one of the Tyrants of the watery Empire; and do thereby a still greater Service to the weaker Sort of Inhabitants, of those Regions; the *Pike* is esteem'd by Naturalists, the longest liv'd of all Fishes.

I am not of the Opinion of those, who pretend the larger he is found, the coarser is the Food, and so *vice versa*; for to my Palate, there is nothing more insipid than a small *Pike*; and nothing more troublesome, since he is nothing else but Bones. This Fish never swims in Shoals, and a good Reason for it, is, that he devours his own Kind. He spawns in *February* and *March*. The best Sort is in Rivers, the worst in Meres, or Ponds. His common Food, is either Pickerel-weed, Frogs, or what Fish he can procure. Some say that this Pickerel-weed, both feeds and breeds them.

There are two Ways of *Fishing* for the *Pike*; by the *Ledger-Bait*, and the *Walking-Bait*. The *Ledger-Bait*, is that fixed in one certain Place, and which the Angler may leave behind him. And this must be a living Bait, either Fish or Frog. Of Fish, the best are the Dace, Roach, or Pearch; for Frogs, the yellowest are the best. To apply it, if a Fish, stick the Hook through his upper Lip; then fastening it to a strong Line, ten or twelve Yards long, tie the other End of the Line, either to some Stake in the Ground, or to some Bough of a Tree, near the *Pike's* usual Haunt, or where you think it is like he may come. Then wind your Line on a forked Stick (big enough to keep the Bait from drawing it under Water) all about half a Yard, or somewhat more, and your Stick having a small Cleft at the End, fasten your Line therein; but so, that when the *Pike* comes, he may easily draw it forth, and have Line enough to go to his Hold and Pouch. If the Bait be a Frog, the arming Wire is to be put in his Mouth, and out at his Gills, and one of the Legs to be stitched or tied over the upper Joint of the Wire.

The *Walking-Bait*, is that which the Fisher casts in, and conducts with a Rod, &c. This is perform'd by a Trole, with a Winch to wind it up withal. At the Top of the Rod is to be placed a Ring for the Line to run through. The Line for two Yards and a Quarter next the Hook, to be of Silk double, and armed with Wires, the Length of seven Inches: On the Shank of the Hook is to be fastened a smooth Piece of Lead, so as to sink the Fish Bait, which is to be a Gudgeon with his Head downwards. Thus dispose the Bait to be cast up and down, and if you feel the Fish at the Hook, give him length enough to run away with the Bait, and pouch it; then strike him with a smart Jerk. To fish with a dead Bait, use a Minnow, yellow Frog, Dace, or Roach, anointed with Gum of Jey, dissolved in Oil of Spike; and cast it where the *Pike* frequents. After it has lain a little while at the Bottom, draw it to the Top, and soup the Stream, and you'll soon perceive a *Pike*, in earnest Pursuit thereof. This Fish bites best about Three in the Afternoon, in clear Water, with a gentle Gale, from the Middle of Summer, to the End of Autumn; but in Winter all Day long; and in the Spring he bites best early in the Morning, and late at Night.

The *Roach* is scarce worth fishing for, it being no delicate Fish; but he is as silly, as the *Carp* is crafty. Those in Rivers are more valued than those in Ponds,

tho' the latter are much the larger; they spawn about the Middle of *May*.

To angle for *Roaches* in *April*, the Cads, or Worms, are proper Baits; and small white Snails, or Flies; which Baits must be under Water, for *Roaches* will not bite at the Top. Others use a May-Fly in that Season with good Success. In Autumn you may fish for them with Paste, only made of the Crumbs of fine white Bread, moulded with a little Water, and the Labour of your Hands, into a tough Paste, coloured, not very deep, with red Lead, with which you may mix a little fine Cotton, or Lint, and a little Butter; these last will make it hold on, and not wash off your Hook, with which you must fish with much Circumspection, or you lose your Bait. In Winter, Gentles are the best Bait. Sprouted Malt, the young Brood of Wasps, and Bees dipped in Blood, and the thick Blood of Sheep, half dried, are *Nostrums* in this Sort of *Fishing*.

The Season for catching *Tench*, is in *June*, *July*, and *August*, very early and late, or even all Night, in the still Part of Rivers. His Bait is a large Red Worm, at which he bites very eagerly, if first dipt in Tar. He also delights in all Sorts of Pastes, made up of strong scented Oils, or with Tar: Or a Paste of brown Bread and Honey; nor does he refuse the Cad-worm, Lob-worm, Flag-worm, green Gentles, Cad-bait, or soft boil'd Bread Grain.

Note, That the *Tench* is a fine fresh Water Fish, having very small Scales, but large, smooth Fins, with a red Circle about the Eyes, and a little Barb hanging at each Corner of the Mouth. It takes more Delight among Weeds in Ponds, than in clear Rivers, and covets to feed in foul Water. His Slime is said to have a healing Quality for wounded Fish; upon which he is commonly called the *Fishes Physician*; when the *Carp*, *Pike*, &c. are sick, they find Relief by rubbing themselves against the *Tench*; of which the *Pike* is so sensible, that he will not injure the *Tench*, tho' he will seize on any other Fish of his Size that comes in his Way.

We'll conclude our Angling, with the *Trout*, which is a delicious fresh Water Fish, speckled with red and yellow; coming in, and going out of Season with the *Back*, and spawning in *October* and *November*; whereas all the other Species spawn in hot Summer Weather. All Winter long they are sick, lean, and unwholsome, and frequently louzy. As the Spring comes on, deserting the still, deep Waters, they repair to the gravelly Ground, against which they continue to rub, till they have got rid of their Lice, which are a Kind of Worms, with large Heads; from that Time, they delight to be in the sharp Streams, and such as are swift; where they lie in wait for Minnows, and May-flies. At the latter End of *May* they are in their Prime.

There are several Sorts of *Trouts*, all valuable; viz. the *Fordridge Trout*, the *Amerly Trout*, the *Bull Trout*, with many others, which for Brevity Sake I forbear mentioning; observing only, that the red and yellow *Trouts* are the best, and of these, the Female, distinguished by a less Head and deeper Body, is preferr'd. They are known to be in Season, by their large Back; which may serve for a Rule for other Fish.

The *Trout* is usually caught with a Worm, Minnow, or Fly, natural or artificial. There are several Sort of Worms, which are Baits for the Angler; the Earth-worm, the Dung-worm, the Maggot, or Gentle; but for the *Trout*, the Lob-worm, and Brandling are the best; or the Squirrel-Tail, having a red Head, streak'd down the Back, and a broad Tail. The Brandling is commonly found in an old Dunghil, Cow-Dung, Hogs-Dung, or Tanners-Bark.

Note,

Note. That whatever Worms you fish withal, are the better for keeping; which must be in an earthen Pot with Moss, which you must change often in Summer, that is, once in three or four Days, and in twice as long Time in Winter.

When you fish for a *Trout* by Hand, on the Ground, take a Lob-Worm, and run your Hook through him, a little above the Middle, and out again a little below it; then draw your Worm above the Arming of your Hook, making your first Entrance at the Tail-End, that the Point of the Hook may come out at the Head. When you fish with a Minnow, take the whitest and middle Size, slip the Hook through his Mouth, and the Point and Beard out of the Tail, so as it may lie almost strait on the Hook; then try against the Stream whether it will turn. In Defect of a Minnow, a small Loach may serve the Turn; or for want of either, an artificial one may be made of Cloth, to the Life, which is found every whit as good a Bait as the natural one.

From these different Manners of taking different Sorts of *Fresh-Water Fish*, we'll pass to some particular Observations, with regard to their different Haunts, and Places where they can be met with, and which one must indispensibly know, to be esteemed a good Angler, and angle with some Satisfaction.

Therefore the Angler must understand, that Fishes change Places with the Season. In the Summer, some keep always near the Top or Rim of the Water; and others are continually at the Bottom. For the first you must angle with a Float or Fly; the latter are to be found at the Arches of Bridges, Mill-Ponds, Wears, Flood-Gates, &c. In Winter, all Fish in general fly into deep Waters.

The *Barbel*, *Roach*, *Dace*, and *Ruff*, delight in sandy gravelly Ground. The deepest Part of the River, and the Shadow of Trees, are equally grateful. The *Bream*, *Pike*, and *Chub*, chuse a clayey ouzy Ground; the *Bream* delights most in the Middle of a River, whose Stream is not too rapid, but gently gliding; the *Pike* is for still Waters, full of Fry; and that he may the better and securer seize his Prey, he frequently absconds himself among Water-docks, under Bushes or Bull-rushes. *Carp*, *Tench*, and *Eel*, frequent still, foul, and muddy Waters. *Eels* lie lurking under Roots or Stones; the *Carp* for the deepest Place of the Water; and where there are green Weeds, the *Carp* and *Tench* delight most of all. *Pearch* delight in gentle Streams, not too deep, yet they must not be shallow; and a hollow Bank is their chiefest Refuge. *Gudgeons* love sandy Ground in gentle Streams, they prefer small Rivers to large ones, or small Brooks, and bite best in the Spring till they spawn. The *Salmon* delights most in Rivers which ebb and flow, are large and have a swift Current; in such Rivers are the greatest Plenty; and still better, if the Rivers are rocky or weedy. The *Shad*, *Thwait*, *Plaife*, and *Flounder*, have the greatest Love for salt or brackish Waters, which ebb and flow.

We'll conclude this Treatise by informing our Angler, especially those that are in a Condition to make such Expences, and will have the Satisfaction of *Fishing* when they please, without going far from their own Home, how to make Fish-ponds, or Reservoirs of Water, for the Feeding, Breeding, and Preserving of Fish.

The first Thing to be minded in the making of *Fish-ponds*, is the Ground where it is to be placed, which must be full of Springs, and apt to be moorish: Since the one breeds them well, and the other preserves them from being stolen. The next is the Situation of the Pond, and the Nature of the Currents that fall into it; and likewise that it be refreshed with a little Brook, or with the Rain-Water that falls from the adjacent hilly Ground. Add, that those Ponds which receive the Stale and Dung of Horses, and other Cattle, breed the largest and fattest Fish.

It must be observed, in making the Pond, that the

Head be at the lowest Part of the Ground; and that the Trench of the Flood-gate, or Sluice, have a good swift Fall, that it may not be too long in emptying. If the Pond carry six Foot of Water, it is enough; but it must be eight Foot deep, to receive the Freshes and Rain that should fall into it. It would also be advantageous, to have Shoals on the Sides for the Fish to sun themselves in; and lay their Spawn on; besides, in other Places, certain Holes, hollow Banks, Shelves, Roots of Trees, Islands, &c. to serve as their retiring Places. It must be considered further; whether the Pond be a Breeder; if so, large Carps are never to be expected from thence; the Greatness of the Number of Spawns overstocking the Pond: For large Carps, a Store-pond is ever accounted the best; and to make a Breeding-pond become a Store-pond, we must see what Quantity of Carps it will contain: Then we put in all Milsters, or all Spawners, whereby, in a little Time, one may have Carps that are both large and exceeding fat. Thus by putting in but one Sex, there is an Impossibility of the Increase of them; yet the Roach, notwithstanding that Precaution, will multiply.

Some great Waters are to be reserved for the Head-Quarters of the Fish; whence one may take, or wherein one may put any Quantity thereof. There must be likewise Stews, and other auxiliary Waters; so that any Part of the Stock may be conveyed from one to the other; so, to lose no Time in the Growth of the Fish, but the Water may be employed as well as the Land, to the best Advantage; the Grounds must be viewed, and some Fall found out between the Hills, as near flat as may be, so as to leave a proper Current for the Water: If there be any Difficulty in judging of such, one must take an Opportunity after some sudden Rain, or the breaking up of a great Snow in Winter, and he will plainly see which Way the Ground casts; for the Water will take the true Fall, and run accordingly.

The Condition of the Place must determine the Quantity of Ground to be covered with Water. For Example, we may propose in all fifteen Acres, in three Ponds; or eight Acres in two; and not less; and these Ponds should be placed one above another, so as the Point of the lower may almost reach the Head or Bank of the upper; which Contrivance is no less beautiful than advantageous. The Head or Bank, which by stopping the Current is to raise the Water, and so make a Pond, must be built with the Clay and Earth taken out of the Pond, or Hollow, dug in the lowest Ground above the Bank: The Shape of the Pond to be an half oval, whereof the Flat to come to the Bank, and the longer Diameter run square from it.

Note. That for the Breeding of Fish, the Quality of the Pond, Water, &c. is scarce determinable, by any Symptom or Rule; for some very promising Ponds do not prove serviceable that Way. One of the best Indications of a breeding Pond, is, when there is a good Store of Rush, and gravelling about it, with gravelly Shoals, such as Horse-ponds usually have: So that when a Water takes thus to Breeding, with a few Milsters and Spawners, two or three of each, a whole County may be stock'd in a short Time.

Note. also, That Eels and Pearch are of very good Use to keep down the Stock of Fish; for they prey much upon the Spawn and Fry of a Brood of Fish; and will probably destroy the Superfluity of them. As for Pearch, Tench, Roach, &c. they are observed to breed almost in any Waters, and very numerously; only Eels never breed in standing Waters that are without Springs; and in such are neither found, nor increased, but by putting in: Yet where Springs are they are never wanting, though not put in; and which is most strange of all, no Person ever saw in an Eel, the least Token of Propagation, either by Milt or Spawn; so that whether

whether they breed at all, and how they are produced, are Questions equally mysterious, and never yet resolved.

Having thus provided a Habitation for Fish, we must not let them starve in it, but supply them likewise with Food.

In a Stew thirty or forty Carps may be kept from *October* to *March*, without feeding; and by fishing with Tramels or Flews in *March* or *April*, you may take from your great Waters, to recruit the Stews: But you must not fail to feed all Summer, from *March* to *October* again, as constantly as cooped Chickens are fed, and it will turn to as good an Account.

The Constancy and Regularity of serving the Fish conduces very much to their well eating and thriving. Any sort of Grain boiled is good to feed with, especially Peas and Malt, coarse ground. The Grains after brewing, while fresh and sweet, are very proper; but one Bushel of Malt not brewed, will go as far as two of Grains: Chippings of Bread, and Orts of a Table, steeped in Tap-droppings of strong Beer, or Ale, are excellent Food for Carps. Of these the Quantity of two Quarts to thirty Carps every Day, is sufficient: And so fed Morning and Evening is better than once a Day only. There is a Sort of Food for Fish that may be called accidental, and is no less improving than any that can be provided; and this is when the Pools happen to receive the Wash of Commons, where many Sheep have pastured, the Water is enriched by the Soil, and will feed a much greater Number of Carps than otherwise it would do: And further, the Dung that falls from Cattle, standing in Water in hot Weather, is also a great Nourishment to Fish. The best Food to raise Pikes to an extraordinary Fatness, is Eels; and without them it is not to be done, but in a long Time. Setting these aside, small Perches are the best Meat. Breams put into a Pike-pond, breed exceedingly, and are fit to maintain Pikes; which will take Care they do not increase overmuch: The numerous Fry of Roaches and Rouds which come from the greater Pools into the Pike-quarters, will likewise be good Diet for them. Pikes in all Streams, and Carps in hungry-springing Waters, being fed at certain Times, will come up and take their Meat almost from your Hand.

The best feeding Place is towards the Mouth of the Pond at the Depth of about half a Yard; for by that Means the Deep will be kept clean and neat; the Meat thrown into the Water without other Trouble, will be pick'd up by the Fish, and nothing be lost: Yet there are several Devices for giving them Food, especially Pease; as a square Board let down with Meat on it. When Fish are fed in the larger Pools, or Ponds, where their Numbers are great, Malt boiled, or fresh Grains, is the best Food. Thus Carps may be fed and raised like Capons, and Tenches will feed as well; but *Perch* are not for a Stew in Feeding-time.

As to the Benefits that redound from the keeping of Fish, besides furnishing the Table, and raising Money, your Land will be vastly improved, so as to be really worth, and yet more this Way than by any other Employment whatsoever: For suppose a Meadow of 2 *l.* per Acre, four Acres in Pond, will return every Year a thousand fed Carps, from the least Size to fourteen or fifteen Inches long: Besides Pikes, Perch, Tench, and other Fry; if the Carps are saleable, they will bring Six-pence, Nine-pence, and perhaps Twelve-pence apiece, amounting in all to twenty-five

Pounds; which is six Pound five Shillings per Acre. Some are of Opinion, that the Art of *Angling* is as antient as *Deucalion's* Flood; others attribute the Invention thereof to *Belus*, whom they consider as first Author of virtuous Recreations: And others pretend, that *Seth*, *Noah's* Son, left the Knowledge of Angling to his Posterity, engraven on Pillars of Brass, with the first Rudiments of the Mathematicks and other useful Arts; by which Means they were preserved from perishing in the universal Deluge.

Several say, in Commendation of the Art of *Fishing*, that among the twelve Apostles, there were four of them Fishermen, whom our Saviour elected and inspired to preach the Gospel; and the Reason that some give for this Choice is, that he knew and found the Heart of such Men naturally more inclined to Contemplation and Tranquillity; their Spirits being mild, sweet, and pacifick. Observing besides, that our Saviour seems to have more than a common Respect for their Occupation, for two Reasons: First, that he never reproved these for their Profession, as he did others, *viz.* the Scribes and Money-Changers. Next, he dignified these poor Fishermen with a certain Superiority over the other Apostles. Nay, that which is more observeable is this, that our Saviour took only three of these poor Fishermen, when he ascended the Mount to be Witnesses of his Transfiguration.

Note, That though I have left to every Angler's Ingenuity to make artificial Flies; nevertheless, after a second Thought, I think it best to lay down here the Method of making two Sorts of them, *viz.* the *Palmer-ribbed*, with Silver or Gold; and the *May-Fly*. To make the *Palmer-Fly*, the Angler must arm his Line on the Inside of the Hook; then with a Pair of Scissars cut so much of the Brown of a Mallard's Feathers, as he shall think sufficient to make the Wings; then lay the outermost Part of the Feather next the Hook, and the Point of the Feather towards the Shank of the Hook; and afterwards whip it three or four Times about the Hook, with the same Silk he armed it with, then he makes his Silk fast; which done, he takes a Plover's Top, or the Hackle of the Neck of a Cock, of which he takes one Side of the Feather; then takes the Hackle Silk, or Gold or Silver Thread, and makes all these fast at the Bend of the Hook, working them up to the Wings; every Turn shifting his Fingers, and making a Stop, that the Gold may fall right, which is to be made fast; and the Hackle worked up to the same Place, and also made fast: Then he takes the Hook betwixt his Finger and Thumb, in the left Hand, and with a Needle or Pin parts the Wings in two: Then with the arming Silk he twists it about, as it falls cross between the Wings, and with his Thumb must turn the Points of the Feathers towards the Bend of the Hook, working it three or four Times about the Shank, and afterwards fastening it. If he makes the Ground of Hog's Wool, sandy, black, or white, or of Bear's Wool, or of a red Bullock, he must work these Grounds on a waxed Silk, and must arm and set on the Wings as above-mentioned. The Body of the *May-Fly*, must be wrought with some of these Grounds; which will be very well, when ribb'd with black Hair. He must make the *Oak-Fly*, with orange-tawney, and black for the Body; and the brown of the Mallard's Feather for the Wings.

FORTIFICATION.

FORTIFICATION, also called *Military Architecture*, is the Art of *fortifying* or strengthening a Place, by raising Works around it, to render it capable of being defended by a small Force, against

the Attack of a more numerous Enemy.

Fortifications are divided into *durable* and *temporary*. By *durable Fortifications*, are properly understood the *Fortifications* of Cities, Frontier Places, &c. and by *temporary*

temporary Fortifications, are understood those erected on some emergent Occasions, and for a little Time. Such are Field-works cast up for the seizing and maintaining a Post or Passage; those about Camps, &c. as Circumvallations, Contravallations, Redoubts, Trenches, Batteries, &c.

Durable Fortifications, are divided into *regular*, and *irregular*. The *regular Fortification*, is that wherein the Bastions are all equal; or that built in a regular Polygon, the Sides and Angles whereof are generally about a Musket-shot from each other. In this sort of *Fortification* the Parts being all equal, have the Advantage of being equally defensible, so that there are no weak Places.

The *irregular Fortification*, is that wherein the Bastions are unequal and unlike; or the Sides and Angles not all equal and equidistant. In this sort of *Fortification* the Defence and Strength being unequal, there is a Necessity for reducing the irregular Figure, as near as may be, to a regular one. And as the Irregularity of a Figure depends on the Quantity of Angles and Sides; the Irregularity of a *Fortification*, arises either from the Angles being too small, or the Sides being too long or too short. Consequently an irregular Figure being proposed to be fortified, all the Angles, with the Quantity of the Sides, must be found, to be able to judge how it is to be fortified.

Fortifications, are represented either by Designs on Paper, or by Models of Wood, Plaster, or Pasteboard. There are four Sorts of Delineations, viz. the *Design*, *Ichnography*, *Orthography*, and *Scenography*.

The *DESIGN*, in *Latin*, *Delineatio*, in *Italian*, *Disegno*, is the first Draught of a *Fortification*, by simple Lines, to know the Length thereof.

The *ICHOGRAPHY*, denotes the Plan, or Representation of the Length and Breadth of a Fortress; the distinct Parts of which are marked out, either upon the Ground itself, or upon Paper.

The *ORTOGRAPHY*, is the Profile, or Representation of a *Fortification*, or a Draught so conducted, as that the Length, Breadth, Height, and Thickness of the several Parts are expressed; such as they would appear, if it were Perspective.

The *SCENOGRAPHY*, is the Representation of a *Fortification*, on a perspective Plan, or a Description thereof in all its Dimensions, such as it appears to the Eye.

Note, That before we proceed any farther, we must give here some general Rules to be necessarily observed in the *Fortification* of Places. 1. The Manner of fortifying must be accommodated to that of attacking; so that no one Manner can be assured will always hold, unless it be assured the Manner of besieging be incapable of being alter'd; and to judge of the Perfection of a *Fortification*, the Method of besieging at the Time when it was built, must be considered. 2. All the Parts of a *Fortification*, should be able to resist the most forcible Machines used in besieging. 3. A *Fortification* should be so contriv'd, as that it may be defended with as few Men as possible; which Consideration, when well attended to, saves a World of Expence. 4. That the Defendants may be in the better Condition, they must not be exposed to the Enemies Guns and Mortars; but the Aggressors be exposed to theirs. Hence, 5, all the Parts of a *Fortification* should be so dispos'd, as that they may defend each other; in order to this, every Part there is to be flanked, i. e. capable of being seen and defended from some other, so that there be no Place where an Enemy can lodge himself either unseen, or under Shelter. 6. All the Campaign around must lay open to the Defendants, so that no Hills or Eminences must be allow'd; behind which the Enemy might shelter himself from the Guns of the *Fortification*, or from which he might annoy them with his own. The Fortress, then, is to command

all the Place round about; consequently the Outworks must be lower than the Body of the Place. 7. No Line of Defence to be above Point Blank Musket Shot, which is about one hundred and twenty Fathom. 8. The acuter the Angle at the Centre, the stronger is the Place; as consisting of more Sides, and consequently more defensible.

Mr. *Vauban*, as well as Count *Pagan*, admits of three Sorts of *Fortifications*, viz. the great, where the exterior Polygon has always two hundred Fathoms; the middle, which has always one hundred and eighty; the small which has but one hundred and sixty Fathom.

All *Fortifications* consist of *Lines* and *Angles*, which have various Names according to their different Offices.

The *Angles*, fig. 1. are the *Angle of the Centre*, the *Angle of the Polygon*, the *Angle of the Bastion*, the *Angle of the Courtine*, the *Angle of Defence*, the *flanking Angle*, the *flanked Angle*, and the *Angle of the Epaule*.

The *Lines* are those of the exterior Polygon, of the interior Polygon, of the Perpendicular, of the Line of Defence, of the Complement, of the great Semi-diameter, of the little Semi-diameter, of the Capital, of the Face, of the Demi-gorge, of the Flank, and of the Courtine.

Of these *Lines* and *Angles*, are form'd *Bastions* and *Courtines*, and sometimes *Demi-Bastions*, according to the Situation of the Ground; *Cavaliers*, *Ramparts*, *Fausse-brayes*, *Ditches*, *Counterscarps*, *Covert-ways*, *Half Moons*, *Ravelins*, *Horn-works*, *Crown-works*, *Out-works*, *Esplanades*, *Redents*, and *Tenailles*; which different Pieces of *Fortification*, must be examined every one in particular, beginning by the *Bastion*; to have a clear Theory of *Fortification*, before we can come to the Practice.

A *BASTION*, in the modern Signification, is a huge Mass of Earth, usually faced with Sods, sometimes with Brick, rarely with Stone, standing out from a Rampart, whereof it is a principal Part, and answers to what in the antient *Fortifications*, is called *Bulwark*.

A *Bastion* consists of two Faces, and two Flanks: The Faces are the Lines B C, and C S; including the Angle of the *Bastion*. The Flanks are the Line B A S D. Fig. 1.

Note, That the *Faces* of a *Bastion*, are the two foremost Sides, reaching from the Flanks to the Point of the *Bastion* where they meet. These are commonly the first undermined, by Reason they reach farthest out, and are least flanked, and therefore weakest. The *Flank* is that Part of a *Bastion*, which reaches from the Courtin to the Face, and defends the opposite Face, the *Flank* and the Courtin.

The Union of the two Faces, make the outmost or salient Angle, called also the *Angle of the Bastion*, B C S. fig. 1. The Union of the two Faces to the two Flanks, makes the Side Angles, called the *Shoulders*, or *Epaules of the Bastion*. And the Union of the two other Ends of the Flanks to the two Courtins, the Angles of the Flanks of the *Bastion*.

The Foundation of the *Bastion*, i. e. of a Work consisting of Flanks and Faces, is, that great Rule in *Fortification*, viz. that every Part of a Work must be seen and defended from some other Part; mere Angles therefore are not sufficient, but Flanks and Faces are indispensably requisite. If the *Bastions* E F G, and H I K, Fig. 26. consisted of Faces alone, the Angles G and H could not be defended from the Lines F G, or I H; but if the *Bastion* consists of Flanks and Faces, as A B C S D, all the Points may be defended from the Flanks, there being none, v. g. in the Face B C, but what may be defended from the opposite Angle E L, nor any in the Courtin A E, but what may

may be defended from the adjacent Flanks B A, and E L; nor any in one Flank B A, but may be defended from the other E L.

For the Proportion of the Faces, they are not to be less than twenty-four Rhine-land Perches, nor more than thirty.

The *Flanks* of the *Bastion*, the longer they are the better, provided they stand at the same Angle, under the Line of Defence. Indeed in the ancient *Fortifications*, the *Flank* is made perpendicular to the Courtin, so as to have the Angle out of the Enemies Eyes; but this is now provided for, by withdrawing the lower Part of the *Flank* two or three Perches towards the capital Line; which Part thus withdrawn, is better if made concave, than rectilinear; and if double with a Ditch between, than if single. The Business of disposing the *Flanks* of *Bastions*, makes the principal Part of *Fortification*; it is that on which the Defence principally depends, and which has introduc'd the various Forms and Manners of *fortifying*. If the Angle of the *Bastion* be less than sixty Degrees, it will be too small to give Room for Guns; and besides so acute as to be easily beaten down by the Enemies Guns: To which may be added, that it will either render the Line of Defence too long, or the *Flanks* too short; it must therefore be more than sixty Degrees; but whether or no it should be a right Angle, some intermediate Angle between sixty or ninety, or even whether or no it should exceed a right Angle, is still disputed. Hence it follows, that a Triangle can never be fortified, in regard some, or all the Angles will be either sixty Degrees, or less than sixty.

Note, That *Degree*, in this Place, is a Division of a Circle, including a three hundred and sixtieth Part thereof. Every Circle, great and small, is supposed to be divided into 360 Parts, called *Degrees*; the *Degree* is subdivided into 60 lesser Parts, called *Minutes*; the Minute into 60 others, called *Seconds*; the Second into 60 *Thirds*, &c. which will be more particularized in my Treatise of *Geometry*, under the Letter G.

Bastions are of divers Kinds, *solid*, *void*, *flat*, *cut*, &c. The *solid Bastions* are those that are filled up entirely, and have the Earth equal to the Height of the Rampart, without any void Space towards the Centre. *Void*, or *hollow Bastions*, are those surrounded with a Rampart, and a Parapet only ranging round their Flanks and Faces, so as to have a void Space towards the Centre; where the Ground is so low, that if the Rampart be taken, no Retrenchment can be made in the Centre, but what will lie under the Fire of the Besieged. A *flat Bastion*, is a *Bastion* built on a right Line in the Middle of a Courtin, when it is too long to be defended by the *Bastion* at its Extremes. A *cut Bastion*, is that, whose Point is cut off, and in lieu thereof, has a re-entring Angle, or an Angle inwards, with two Points outwards; sometimes also called a *Bastion with a Tenaille*; used either when without such a Contrivance, the Angle would be too acute, or when Water or other Impediment hinders the carrying on the *Bastion* to its full Extent.

There are, likewise, *compos'd*, *regular*, *irregular*, *deform'd*, *demi*, and *double Bastions*. A *compos'd Bastion*, is when the two Sides of the interior Polygon are very unequal, which makes the Gorges also unequal. A *regular Bastion*, is that which has its due Proportion of Faces, Flanks, and Gorges; the Faces being of an equal Length, the Flanks the same, and the two Angles of the Shoulder equal. An *irregular Bastion*, is where this Proportion and Equality is not observed. A *deform'd Bastion*, is where the Irregularity of the Lines and Angles makes the *Bastion* out of Shape, as when it wants one of its Demi-Gorges, one Side of the interior Polygon being too short. A *Demi-Bastion*, is that which has but one Face and one Flank, called also an *Épaulement*; to fortify the Angle of a Place

that is too acute, they cut off the Point, and make two *Demi-Bastions*, which form a *Tenaille*, or a re-entring Angle. Their chief Use is before a Horn-work, or Crown-work. A *double Bastion*, is that which on the Plain of the great *Bastion*, has another *Bastion* built higher, somewhat after the Manner of a Cavalier; leaving twelve or eighteen Feet between the Parapet of the lower, and the Foot of the higher.

Note, That every *Bastion* hath its *Capitals*, *Gorges*, and *Distances*. The *Capital* of a *Bastion*, is a Line drawn from the Angle of the Polygon, to the Point of the *Bastion*. Those *Capitals* are from thirty-five, to forty Fathom long, from the Point of the *Bastion*, to the Point where the two Demi-Gorges meet. The *Gorge* of a *Bastion*, is what remains of the Sides of the Polygon of a Place, after retrenching the Courtins: In which it makes an Angle in the Centre of the *Bastion*; such is A H D, Fig. 1. The *Demi-Gorge*, or *Half-Gorge*, is the Entrance into the *Bastion*; not taken directly from Angle to Angle, where the *Bastion* joins to the Courtin, but from the Angle of the Flank to the Centre of the *Bastion*, or Angle the two Courtins would make, were they thus protracted to meet in the *Bastion*. The *Distance* of the *Bastions*, is the Sides of the exterior Polygon.

The COURTIN, *Curtain*, or *Curtin* (the next Piece of *Fortification* which falls under our Consideration) is that Part of a Wall or Rampart, which is between two *Bastions*; or which joins the Flanks thereof: q q, Fig. 8. The *Courtin* is usually bordered with a Parapet five Foot high; behind which the Soldiers stand, to fire upon the Covert-way, and into the Moat. Besiegers seldom carry on their Attacks against the *Courtin*, because it is the best flanked of any Part.

The *Courtin* has its *Angle* and *Complement*. The *Angle of the Courtin*, or of the Flank, is that made by or contained between the *Courtin* and the Flank. The *Complement of the Courtin*, is that Part of the interior Side thereof which makes the Demi-Gorge.

From this we'll pass to the CAVALIER, which is a Mount, or Elevation of Earth, either round or oblong, having a Platform on the Top, bordered with a Parapet, to cover the Cannon placed on it, and cut with Embrazures to fire through; serving to overlook and command all around the Place. *Cavaliers* are raised in Sieges on the *Bastions* and Courtins of Ramparts, in order to fire on the Eminences around, and oblige the Enemy to get farther off, as well as to scour the Trenches. But the Gorge of the *Bastion*, is the Place where *Cavaliers* are most properly erected; those raised on the *Courtin*, being rather called *Platforms*.

A PLATFORM, is an Elevation of Earth, on which Cannon is placed to fire on the Enemy. Such are the Mounts on the Middle of the *Courtin*; and there is always one on the Ramparts where the Cannon are mounted. The *Platform* is made by heaping up of Earth on the Rampart; or by an Arrangement of *Madriers*, rising insensibly for the Cannon to roll on; either in a Casemate, or on an Attack in the Out-Works.

Note, That a *Madrier*, in this Place, denotes a long and broad Plank, used for supporting Earth.

Next follows the RAMPART, which is a massy Bank, or Elevation of Earth, raised about the Body of a Place, to cover it from the great Shot. Upon the Rampart the Soldiers continually keep Guard, and Pieces of Artillery are planted for the Defence of the Place. Hence, to shelter the Guard from the Enemies Shot, the Outside of the *Rampart* is built higher than the Inside, *i. e.* a Parapet is raised upon it with a Platform. Hence, also, Earth not being capable to be raised perpendicularly, like Stone; the *Rampart*

part is built with a *Talus*, or Slope, both on the inner and outer Side.. The *Rampart* is sometimes lined; *i. e.* fortify'd with a Stone Wall within Side; otherwise it has a *Berme*. It is encompassed with a Moat or Ditch, out of which the Earth that forms the *Rampart* is dug. The Height of the *Rampart* should not exceed three Fathom, this being sufficient to cover the Houses from the Battery of the Cannon; neither ought its Thickness to be above ten or twelve, unless more Earth be taken out of the Ditch, than can be otherwise bestow'd. The *Ramparts* of Half-Moons are the better for being low, that the small Fire of the Defendants, may the better reach the Bottom of the Ditch: But yet they must be so high, as not to be commanded by the *Covert-way*.

Note, That *Talus* of a Bastion, or Rampart, is the Slope, or Diminution allow'd to such a Work; whether it be of Earth or Stone, the better to support its Weight. There is an exterior *Talus*, and an interior one. The exterior *Talus* for Work, is its Slope on the Side towards the Country; which is always made as little as possible, to prevent the Enemies Scalado; unless the Earth be bad, and then it is absolutely necessary to allow a considerable *Talus* for its Parapet. The interior *Talus* of a Work, is its Slope on the Inside towards the Place.

Note, Also, that *Berme*, is a small Space of Ground, four or five Foot wide, left without the Rampart, between its Foot and the Side of the Moat, to receive the Earth that rolls down from the Rampart, and prevent its falling into, and filling up the Moat. This is also called *Leziere*, *Relais*, *Retraite*, *Pas de Souris*, *Foreland*, &c. Sometimes for more Security, the *Berme* is pallisaded.

Next comes the *FAUSSE-BRAYE*, which is an Elevation of Earth, two or three Fathom broad, round the Foot of the Rampart on the Outside, defended by a Parapet, which parts it from the *Berme*, and the Edge of the Ditch: Its Use is for the Defence of the Ditch. The *Fausse-braye*, is the same with what is otherwise called *Chemin des Rondes* & *basse enceinte*, it is of little Use where Ramparts are faced with Wall; because of the Rubbish which the Cannon beats down into it. For this Reason, Engineers will have none before the Faces of the Bastion, where the Breach is commonly made; because the Ruins falling, the *Fausse-braye* makes the Ascent to the Breach the easier: Besides, that what flies from the Faces kills the Soldiers placed to defend it.

From the *Fausse-braye* we'll descend into the *DITCH*, also called *Fosse* and *Moat*, and is a Trench dug round the Rampart, or Wall of a fortify'd Place, between the Scarp and Counterscarp, *b b b*, Fig. 8. Some Ditches are dry, others full of Water; each whereof have their Advantages. The *Ditch* should be of such a Breadth, as that the tallest Tree may not reach over it, *i. e.* from 15 to 20 Fathoms; though the Rule others give for the Dimensions of the Ditch, is, that it affords Earth enough to build the Rampart of due Magnitude.

From the *Ditch* we'll ascend on the *COUNTER-SCARP*, which is properly the outward, or exterior *Talus* of the *Ditch*; though at present is understood under that Name, the *Covert-way*, with its Parapet.

But they are mistaken, for the *COVERT-WAY* is a Space of Ground, level with the adjoining Country, on the Edge of the Ditch, ranging quite round the Half-Moons, and other Works without-side the Ditch, *b b*, Fig. 8. It is otherwise called *Corridor*, and has a Parapet together with its *Banquette* and *Glacis*, which form the Height of the Parapet. One of the greatest Difficulties in a Siege, is to make a Lodgment on the *Covert-way*; because, usually, the Besieged pallisade it along the Middle, and undermine it on all Sides. This is also, sometimes, called the *Counterscarp*, because it is on the Edge of the *Scarp*.

Note, That a *Banquette*, is a little Foot-Bank, or Elevation of Earth, forming a Path which runs along the Inside of a Parapet; by which the Musqueteers get up, to discover the Counterscarp, or to fire on the Enemies in the Moat, or in the *Covert-way*. The *Banquette* is generally a Foot and a half high, and almost three Foot broad; having two or three Steps to mount it by. Where the Parapet is very high, they make a double *Banquette*, one over another.

A *Parapet* or *Breast-work*, is a Defence or Skreen, on the Extream of a Rampart, or other Work, serving to cover the Soldiers, and the Cannon from the Enemies Fire. *Parapets* are raised on all Works; where it is necessary to cover the Men from the Enemies Fire, both within and without the Place, and even the Approaches. The *Parapet* Royal, or that of the Rampart, is to be of Earth, Cannon-Proof, from eighteen to twenty Foot thick, six Foot high towards the Place, and four or five towards the Rampart. This Difference of Height, makes a *Glacis*, or Slope, for the Musqueteers to fire down into the Ditch, or at least the Counterscarp. The Parapet of the Wall is sometimes of Stone. The Parapet of the Trenches, is either made of the Earth dug up, or of Gabions, Fascines, Sacks of Earth, or the like.

Glacis is a sloping Bank, which reaches from the Parapet of the Counterscarp, or *Covert-way*, to the level Side of the Field, *a a a, c*, Fig. 8. The *Glacis*, otherwise *Esplanade*, is about six Foot high; and loses itself by an insensible Diminution in the Space of ten Fathoms.

From the *Covert-way*, we'll pass to the *HALF-MOON*, *Demi-Lune*, which is an Out-work consisting of two Faces, forming together a saliant Angle; whose Gorge is turn'd like an Half-Moon. Half-Moons are sometimes raised before the Courtin, when the Ditch is wider than it ought to be; in which Case it is much the same with the *Ravelin*, only that the *Gorge* of an Half-Moon, is made bending in like a Bow, or Crescent, and is chiefly used to cover the Point of the Bastion; whereas *Ravelins* are always placed before the Courtin. But they are both defective as being ill flanked.

Since we have mentioned *RAVELIN*, we'll say, that it is now a detached Work, composed only of two Faces, which make a saliant Angle, without any Flanks; and raised before the Courtin on the Counterscarp of the Place. A *Ravelin* is a triangular Work, resembling the Point of a Bastion, with the Flanks cut off, *i i i*, Fig. 8. Its Use before a Courtin, is, to cover the opposite Flanks of the two next Bastions. It is used also to cover a Bridge or a Gate, and is always placed without the Moat. What the Engineers call a *Ravelin*, the Soldiers generally call a *Demi-Lune*, or Half-Moon. There are also double *Ravelins*, which serve to defend each other. They are said to be double when they are joined by a Courtin.

To cover and defend a Courtin, Bastion, or other Places suspected to be weaker than the rest; as also to possess a Height, there is a Sort of Out-work erected, and advancing towards the Field called *Horn-work*, which consists of two Demi-Bastions, as *L M N* and *O P Q*, fig. 9. joined by a Courtin *N O*. Its Sides or Flanks are usually parallel, tho' sometimes they approach or contract towards the Place, forming what they call a *Queue d'hyrondel*, or *Swallow's Tail*; when the Flanks are too long, they sometimes make Epaulments to flank them. The Parts of the Horn-work, next the Country, is to be defended by a Parapet.

Two *Horn-works* joined together, make a *Crown-work*, which is an Out-work running into the Field; designed to keep off the Enemy, gain some Hill, or advantageous Post, and cover the Out-works of the Place, *l l*, Fig. 8. The Crown-work consists of two Demi-Bastions at the Extremes, and an entire Bastion in the Middle with Courtins.

Note,

Note, That all those Works made without-side the Ditch, or *Fossé*, to cover and defend it, are called *Out-works*. *Out-works* called also *advanced*, and *detached Works*, are those which not only serve to cover the Body of the Place, but also to keep the Enemy at a Distance, and prevent their taking Advantage of the Cavities and Elevations, usually found in the Places about the Counterscarp; which may serve them either as Lodgments, or a *Rideaux*, to facilitate the carrying on their Trenches, and planting their Batteries against the Place.

There is a Kind of Work indented in form of the Teeth of a Saw, with Saliant, and re-entring Angles, to the End that one Part may flank or defend another, called *REDENS*, *Redans*, or *Redant*. It is also called *Saw-work*, and *indented Work*, and is frequently us'd in the *fortifying* of Walls, where it is not necessary to be at the Expence of building Bastions; as when they stand on the Side of a River, a Marsh, the Sea, &c. The Parapet of the Corridor is frequently redented, or carried on in the Way of *Redens*.

There is also a Kind of Out-work, consisting of two parallel Sides, with a Front wherein is a re-entring Angle, called *TENAILLE*, which is of two Kinds, *viz.* *simple* and *double*. The *simple*, or *single Tenaille*, is a large Out-work, as D A B C E, consisting of two Faces or Sides, A B, and C B, including a re-entring Angle B, fig. 9, and fig. 8. *d.* *Double*, or *flanked Tenaille*, is a large Out-work, consisting of two *simple Tenailles*, or three Salients, and two re-entring Angles, F G H, and H I K, fig. 8. *e.* The great Defects of *Tenailles* are, that they take up too much Room, and on that Account are advantageous to the Enemy; that the Angle B, is undefended; the Height of the Parapet hindering the seeing down into it, so that the Enemy can lodge there under Covert: And that the Sides A D and C E, are not sufficiently flanked. For these Reasons, *Tenailles* are now excluded out of *Fortifications* by the best Engineers, and never made, but where there wants Time to form a Horn-work. The *Tenaille* of the Place, is the Front of the Place, comprehended between the Points of two neighbouring Bastions; including the Courtin, the two Flanks raised on the Courtin, and the two Sides of the Bastions which face one another; so that the *Tenaille* is the same with what is otherwise called the Face of the Fortrefs. The *Tenaille* of the Ditch, is a low Work raised before the Courtin in the Middle of the *Fossé*, or Ditch. It is of three Sorts, the first is composed of a Courtin, two Flanks, and two Faces: The Rampart of the Courtin, including the Parapet and Talus, is but five Fathoms thick; but the Rampart of the Flanks and Faces, seven, *e* fig. 8. The second, which M. *Vauban* says he found to be of very good Defence, is composed only of two Faces, made on the Lines of Defence, whose Ramparts and Faces are parallel. The third Sort only differs from the second in this, that its Rampart is parallel to the Courtin of the Place. All three Sorts are good Defences for the Ditch, and lie so low, that they cannot be hurt by the Besiegers Cannon, till they are Masters of the Covert-way, and have planted their Artillery there.

Note, That there is an Inclosure of Stakes, or Piles, drove into the Ground, six or seven Inches square, and eight Foot long; three whereof are hid under Ground, called *Palisade*, or *Palisado*; and are used to fortify the Avenues of open Ports, Gorges, Half-Moons, the Bottom of Ditches, the Parapets of Covert-ways; and in general, all Posts liable to Surprise, and to which the Access is easy, &c. *Palisades* are usually pointed perpendicularly; though some make an Angle inclining towards the Ground next the Enemy, that the Ropes cast over them to tear them up, may slip.

After this theoretical Account of all the different Pieces of Work which compose the *Fortification* of a Place, we must apply ourselves to the Practice; and

endeavour to *fortify* a Place (if possible) with all the different Works heretofore mention'd. But previously to it, we must know that there have been invented various Methods of *fortifying*; the principal, and those which chiefly obtain through *Europe*, are those of *Vauban*, *Blondel*, *Pagan*, *Coeborn*, and *Sheiter*, from which all the rest are easily conceived.

Note, That the Figure, or Perimeter (*i. e.* the *Ambit*, or Extent that binds a Figure, or Body) of a *Fortress*, or *fortify'd* Place, is called *POLYGON*, which is a Figure whose Perimeter consists of more than four Sides, and Angles. If the Sides and Angles be equal, the Figure is called a *regular Polygon*. *Polygons* are distinguished according to the Number of their Sides. Those of five Sides, are called *Pentagons*; those of six, *Hexagons*; those of seven, *Heptagons*; those of eight, *Octagons*, &c. The *Polygon* of a Place, is distinguished into exterior, and interior *Polygon*. The exterior *Polygon*, is a right Line drawn from the *Vertex*, or Point of a Bastion, to the *Vertex*, or Point of the next adjacent Bastion. The interior *Polygon*, is a right Line drawn from the Centre of one Bastion, to the Centre of another.

We'll begin by making a Draught of a regular *Pentagon*, according to M. *Vauban's* Method, of his middle *Fortification*, which has always 180 Fathoms. Therefore, to divide the Circumference, we'll take 76 (*o b* 1. and make a Circle of it, which we'll divide into five equal Parts, each whereof will have 90, (*o*, we'll divide the Sides into two Parts, and draw from the Centre, as well through the Angles of the Figure, as thro' the Points found in the Middle of the Sides, right Lines. We'll give from the same Middle, on the Lines drawn towards the Centre, to the Square the eighth Part, to the Pentagon the seventh, and to all the others, the sixth Part of the exterior Side; which makes the Perpendicular A I, fig. 2. afterwards we'll draw through that Point of the two Angles of the neighbouring Gorges, the Lines of Defence A P, O B.

To form the Flank, the Faces, and the Courtin, we'll put on the Lines of Defence, the Faces of the Angles A B, &c. which are at all the Polygons; at the first Rank, 27 (*o*, at the second 25; and at the third, 23, (as A *a* B *b*) we'll take, besides, the Distance between the two Extremes of the Faces, as *a b*, placing first one Leg of the Compass in *a*, and directing the other towards the Line of Defence, where we'll make the Point P, and afterwards rest the Compass in *b*; and directing it, likewise, from the Point *a* towards *o*, we draw *a o b* and P together, to make up the Flanks, and *o P* to make up the Courtin.

To form the *Orillon*, as well as the *Brifures*, and the hollow Tower, we divide the Flanks found, into three equal Parts, and put on the superior Parts, Semi-Circles, which touch the Lines of Defence, and that's what makes the *Orillon*. Besides which, we draw Lines from the Points A, B, for Example, from the Points *u*, *o*, *r*, P, &c. towards the Capital, as *r*, *f*, *w*, *t*, &c. O *o*, P *p*, &c. of three Verge in Length. We afterwards take the Distance, *u o*, or *r P*, and make of *u* and of *o*, as well as of P and *r*, outward Intersections, which will give the Centre for the Arch *t o f p*, which is called the hollow Tower.

To make the *Tenaille* of the *Fausse-braye*, we put the Angles of the Shoulder, or *Epaule*, three Verge, from *a* and *b*, on the Lines of Defence, in *c* and *e*, dividing what remains, by the Intersection of the Lines of Defence, as C *c*, and *e i*, into two Parts in *d* and *f*, thus *c d* and *e f*, make the Faces of the *Tenaille* in the Ditch or *Fossé*. We draw from *d*, the Line *d g*, so that it be perpendicular, or make a right Angle, with the Line of Defence *g f*. Likewise, we draw *f h*, to be perpendicular on the Line *d h*, thus those Lines will be the Flanks, and *g h* will give the Courtin.

Note,

Note, That in the other Figures we'll content ourselves in making Pieces of the Pentagon, according to a larger Scale.

The *Ichnography* of the *Pentagon*, on the Draught, is made by Means of this Table, which may be used in all Works, either regular, or irregular.

	Feet.
The Base of the Rampart,	66
The Base of the Parapet,	21
The Banquette of the Parapet,	03
The other Banquette,	01½
The Ditch,	120
The Covert-way,	36
The Gorge of the Place of Arms,	60
Its Face six Verges, six Verges and a half, to seven.	

The Glacis ten, to twelve Verges.

The Use of this Table is as follows :

We take 66 Feet for the *Base of the Rampart*, and draw them parallel, inwards, with the Faces, hollow Towers, inferior Brisures, and the Courtins. But if we'll have solid Bastions, we make no Lines to the hollow Towers, nor to the Faces, but join the lower ones with the Brisures, by a right Line, or by Demi-Circles. To make the Line, round the hollow Tower, parallel, we must put the 66 Feet of the Brisure, still more inwards, and take the Distance of the hollow Tower to that Place, with which the Parallel is drawn from the same Centre.

We take, besides, for the Parapet, 21 Feet, and draw, likewise, with the Line of the Draught, Parallels inwards, to the Faces, Orillons, hollow Towers, inferior Brisures, and to the Courtins, before the *Ichnography* of the Parapet. To that Line we draw another Parallel 3 Feet more inwards, and still more inwards, another of a Foot and a half broad.

The *Ditch* is drawn parallel to the Faces, 120 Feet broad, its Lines cutting one another before the Courtin, and it is made round at the Point of the Bastion, that it may be of an equal Breadth every where. If the Ditch is marshy, it must be full of small Herbs, if dry, of small Points; and if to be filled with Water, of something which can represent Water.

For the *Covert-way*, we trace round the Ditch, outwards, a Parallel, 36 Feet long. Of the re-entring Angles of those Lines, *a b* and *c*, we put on each Side (in *b c*, and *d e*) five Verges outwards, for the Gorges of the Places of Arms; we make of those Points, with the Breadth of six Verges, Intersections, in *f* and *g*; and join the Lines *b f*, and *e f d g*, and *e g*, together; closing, lastly, on both Sides, the Angles *b i k*, and *m n o*, and drawing afterwards the Line *p b i k f m n o q*, as the interior Line of the Glacis.

For the *Traverses*, we continue the Faces of the Places of Arms, *viz.* of *c d e f*, downwards as far as the Ditch; and afterwards make Parallels outwards of the Places of Arms, eighteen Feet broad. Lastly we draw on both Sides, inwards, Banquettes of two Feet broad, so that the Space in the Middle be 14 Feet broad; and that's what is called *Traverses*. Further, we draw Parallels with the interior Line of the Glacis, inside, towards the Covert-way, with the Breadth of 8 Feet for a large Banquette, in the Middle thereof we place Palisadoes; we afterwards draw, besides, still more inwards, an ordinary Banquette of a Foot and a half. Lastly, we draw an exterior Line, of the Breadth of 10 to 12 Verges, and join them together with transverling Lines.

We draw Parallels to the Faces and Flanks of the Tenaille of the *Fausse-braye*, inwards, five Verges broad, and join them together before the Courtin, by a Parallel from two and a half to three Verges in Breadth, which makes the Base of the Rampart. The Parapet to the Faces, is equal to that of the great Rampart, or thereabouts; but that of the Courtin is but eight Feet broad.

To put a *Half-Moon*, or *Ravelin* before the Courtin, we take the Distance of the Angle of the Flank,

and of the Courtin, as far as the Angle of the *Epaule*, or Shoulder, over-against it, and draw from thence an Arch which intersects the Line drawn through the Middle of the Polygon; there is found the Point of the Half-Moon; then draw from thence the Faces, on each Side towards the Angles of the *Epaule*, as far as the Ditch. If we want to make Flanks, we put a Rule to the interior Line of the Glacis, and mark the Points where it intersects the Faces of the Half-Moon, or Ravelin: From hence we make Lines fall perpendicularly on those of the Ditch; these are the Flanks of the Ravelin.

For the Base of the Rampart, it is made parallel to the Flank and Faces, five Verges in breadth; the Parapet is every where equal to that of the great Rampart; the Ditch is parallel to the Faces, and six Yards broad.

Note, That the Covert-way, as heretofore described, environs all the Out-works.

To make a *Horn-work* before the Courtin, we put the Point of the Capital of the Ravelin, on the Line which comes out through the Middle of the Polygon, 44 Verges outwards, (as *Q G*, fig. 5.) we make of the Point *G*, on each Side, an Arch of 30 Yards, and intersect those two Arches of the *Epaule*, with 70 Yards in *H* and *f*, and draw *H f*. Afterwards we'll put, from the Middle of that Line in *G*, 10 Yards inside towards *H*, and draw from *E* and *f* Lines of Defence cross-wise, on which we'll put the Faces 18 Yards long; forming the Flanks with their Orillons and hollow Towers, in the same Manner we have done it to the Body of the Place, except that 4 Yards must always be taken from the Flank for the Orillon, and the rest remains for the Covert-flank, with the hollow Tower.

Note, That *Orillon* is a small rounding of Earth, lined with a Wall, raised on the Shoulders of those Bastions which have Casemates; to cover the Cannon in the retired Flank, and prevent their being dismounted by the Enemy. There are other Sorts of Orillons properly call'd *Epaulements*.

From *E f* we draw the Wings towards the Angles of the Shoulder, as far as the Ditch; and thus the Design of the *Horn-work* is made in the same Manner as that of the Body of the Place, except that the Measures are different; *viz.* the Base of the Rampart has 4 Yards, that of the Parapet 18 Feet, and the Breadth of the Ditch five Yards.

To make a *Horn-work*, before the Bastion, we put the Point of the Bastion lengthened 44 Yards, outwards, as far as *B*, Fig. 6; draw through *B*, the Line *C D*, which intersects the lengthened Diameter into right Angles. We make *B C*, *B D* 30 Yards each, and form on that the *Horn-work*, with its Faces, Flanks and Courtins. We place the Angle of the Shoulder of the Body of the Place on the Faces, 6 Yards and a half in *o* and *p*, and draw towards those Points the Wings of our *Horn-work*, which compleats the Design. But these Sorts of Works are seldom used.

We make a *Crown-work* fig. 7. before the Courtin, by placing the Point of the Ravelin (or in case there was none in the Place where that Point should be) 50 Yards outwards towards *B*. Making of that Point on each Side, an Angle of the Line *A*, fig. 7. each whereof is to have from 64 to 70 Degrees, as *C B A*, and *D B A*; we put on those Lines *B C* and *B D* twice 25 Yards in *E C*, and *f D*. From *E* and *f*, we draw Perpendiculars of 9 Yards each, as *E G*, *f H*; and draw thereby, from *E* and *f*, the Lines of Defence cross-ways; on which we place the Faces, of 15 Yards in length, and form the Flanks, as in the *Horn-work*; and thus the Courtins form themselves. We put the Angle of the Shoulder of the Body of the Place five Yards on the Faces, and draw towards those Points the Wings of the *Crown-work* as far as

the Ditch. If we should want to place a Ravelin before the Courtin of the Horn-work, or Crown-work, the Process is the same as demonstrated in the Body of the Place; the Base of the Rampart has three Yards, that of the Parapet 15 Feet; and the Ditch three Yards and a half.

When we design to make the great Lunettes of M. Vauban, having made the Draught of the Ravelin, which ought to be done, previously to any thing else, we continue its Faces on both Sides, from A (fig. 9. A) into B and C, placing afterwards the Lines BD, and EC, of the Ditch of the Ravelin outwards, which must be from 22 to 25 Yards long. On the Lines BD, and CE, we make the Angles DBf, and ECG, of 60 Degrees; and thus the Lunettes will be made. The Profile of the Rampart, and of the Ditch, is the same as to the Horn-work.

Note, That *Lunette* is an envelop'd Counter-guard, or Elevation of Earth, made in the Middle of the *Fosse*, before the Courtin, about five Fathoms in Breadth. *Lunettes* are usually made in Ditches full of Water, and serve to the same Purpose as *Fausse-brayes*, to dispute the Passage of the Ditch. The *Lunette* consists of two Faces, which form a re-entring Angle; and its *Terreplain* being only twelve Feet wide, is a little rais'd above the Level of the Water, having a Parapet three Fathoms thick.

If we will make small *Lunettes*, as well as *Counter-guards*, of the re-entring Angles AB, fig. 9. B, which the *Fosse* of the Ravelin, and the great Ditch make; we must put on each Side, outwards, in CD, and EF, 10 Yards for the Demi-Gorges of the Lunettes, and make the Intersections in G and H, 12 or 13 Yards broad, placing the Compass on the Points found of the Demi-Gorges; and thus CG, DG, EH, FH, will give the Faces of the Lunettes.

For the Design of the *Counter-Guards*, we put of the Ditch, five Yards outwards, and draw from the Ditch to the lengthened Diameters, thro' those Points, Lines parallel to the Ditch; as IK, and LM. For the Ichnography thereof, we give to the Rampart the Thickness of three and a half or four Yards; to the Parapet, without the Banquettes, eighteen Feet; for the Breadth of the Ditch, from four to four Yards and a half.

From the *Draught* and *Ichnography*, we'll pass to the *Profile*, which must be drawn in this Manner. After we have made a long right Line, as AR, fig. 3. and AB, which represents the Ground or the Horizon; we put first upon it, according to fig. 10. the *Profile* of the Rampart of the Body of the Place. *a*, is the first Point of the Base, behind which we put immediately on the same Line, for,

The <i>Talus</i> of the interior Wall,	01
The <i>Cordon</i> which is on the Wall,	01
The <i>Talus</i> of the <i>Terreplain</i> ,	03
The Breadth of the <i>Terreplain</i> of the Rampart,	30
The Breadth of the first Banquette,	01½
The Breadth of the second Banquette,	03
The interior <i>Talus</i> of the Parapet,	01
Its superior Breadth,	18
The exterior <i>Talus</i> of the Parapet,	02
The <i>Cordon</i> above, at the exterior Lining,	02½
The <i>Talus</i> of the exterior Lining,	03

Base of the Rampart, or Sum, — 66

We afterwards erect Perpendiculars on the first and last Point, and place upon them the following Measures, one after another; for,

The Height of the interior Lining,	12
That of the <i>Terreplain</i> ,	06
That of the first Banquette,	01½
That of the second Banquette,	01½
The exterior Height of the Parapet,	00½
The interior Height,	04½
Sum,	26

From the Points which are on the horizontal Line, we draw Lines upwards to be Parallel to the Perpendiculars already drawn, and from the Points of the Perpendiculars, we draw other Lines, to be Parallels to the Horizontal. In that Manner the Intersections give us a Retz, in which we can easily trace the Lines of the *Profile*, *a b c d e f g h i k l m n o p*, in drawing only, according to the Figure, from one Point of Intersection to the other. The horizontal Line is marked with small Points; but for those of the Retz, or Net, they are easily blotted out afterwards.

The *Profile* of the Ravelin, is made in the same Manner; it is but of Earth, except the Ditch, which must be lined.

The Measures of the Rampart, are the following ones, marked on the horizontal Line, fig. 3. For,

The interior <i>Talus</i> ,	06
The <i>Terreplain</i> ,	25½
The Breadth of the first Banquette,	01½
The Breadth of the second Banquette,	03
The interior <i>Talus</i> of the Parapet,	01
The superior Breadth of the Parapet,	15
The exterior <i>Talus</i> of the Parapet and Rampart together,	08

The Base of the Rampart, *a o*, Sum, — 60

On the *Perpendiculars*, for

The Height of the Rampart,	13
That of the first Banquette,	01½
That of the second Banquette,	01½
The exterior Height of the Parapet,	01
Its interior Height,	04½
Sum,	21½

In the same Manner is made the Design of the Ramparts of the Outworks, the Measure thereof can be ordinarily this, fig. 3.

On the *horizontal Line*, for

The exterior <i>Talus</i> ,	06
The <i>Terreplain</i> ,	15½
The first Banquette,	01½
The second Banquette,	03
The interior <i>Talus</i> of the Parapet,	01
The superior Height,	15
The exterior <i>Talus</i> of the Rampart with the Parapet,	06

Base of the Rampart, Sum, — 48

On the *Perpendiculars*, for

The Height of the Rampart,	08
That of the first Banquette,	01½
Of the second,	01½
The exterior Height of the Parapet,	01
Its interior Height,	04½
Sum,	16½

As for the *Profile* of the Ditches, it is made in this Manner; where the Ramparts are only made of Earth, without being lin'd, a Berme is left at the Bottom, 6 Feet broad, as *o q*, fig. 3. But when the Rampart is lin'd, the Ditch is joined immediately to the Rampart; the superior Breadth of the Ditch having been mark'd on the horizontal Line, we place likewise on both Sides of the Ditch inwards, the Breadth for the *Talus*; and lower from thence, Perpendiculars, on which we put the Depth of the Ditch. Afterwards we make the Ditch with its two *Talus*'s, and inferior Breadth. The Measures of the Ditch are the following ones.

To the Ditch of the Body of the Place,	Feet
The superior Height,	114
The Base of the interior and exterior <i>Talus</i> ,	03
The inferior Breadth,	108
The Depth,	18

To

To the <i>Ditch</i> of the Ravelin.			Feet.
The superior Breadth,	—	—	72
The Base of the interior and exterior Talus,	—	—	2
The Depth,	—	—	12
The inferior Breadth,	—	—	68

To the <i>Ditches</i> of the other Out-works.			
The superior Breadth,	—	—	54
The Base of the interior and exterior Talus,	—	—	1½
The Depth,	—	—	8
The inferior Breadth,	—	—	51

Lastly, the *Covert-way* with its Parapet, is made thus: We put on the horizontal Line 27 Feet for the *Covert-way*, and one Foot and a half for the first Banquette as usual; for the second 8 Feet, on which are placed Pallisadoes, almost in the middle. All the rest is made in the Manner of the other Parapets; putting at the End 144 Feet, on the horizontal Line, for the Breadth of the Parapet, and drawing a right Line from the inferior Height, as far as there.

The Pieces of the Profiles may be all joined one to another, as plainly seen in fig. 3.

At present we must instruct our Pupil how to trace a Fortress in the Campaign or Field. The best Instrument he can use for that Purpose is a Circle, or Demi-circle, divided into 360 Degrees, each whereof also should be subdivided into 4 or 6 Parts. Commonly this Design is made outwards to the Polygons; but is far better, if it be possible, to make it of the Centre. I'll shew both Methods in the regular Pentagon.

To design a Fortress of the Centre, we make 76 Yards quite strait towards the Place where we want to make one Bastion of the Fortress, which will be the Length of the great Demi-diameter of the Pentagon, at the End whereof we set up a Pike, or Picket. We adjust near that Picket the immobile Dioptries of the Instrument, and with the mobile ones search the Angle of 70 Degrees, which is the Largeness of the Angle of the Centre. We draw thereby another Line, of the Length likewise of 76 Yards and a half, where we set up another Picket. We forward the mobile Dioptries on the 144 Degrees, and proceed as before, measuring 76 Yards and a half, and setting up another Picket, at the End thereof we proceed further on the 216 Degrees. Then on the 288, continuing the same Operation, till we have found the Points of the Bastions. We search besides, the Middle between both, with 45 Yards, and thrust into it small Sticks. We measure, from each Middle directly towards the Centre, the Extent of the Perpendicular, and set up likewise small Sticks on the Points found. Then measure, afterwards, from the Points of the Bastions towards those Sticks, perpendicular, 25 Yards on each Side, for setting up Pikes at the Points found, which mark the Angles of the Shoulders. Lastly, we tie a Cord to one of those Pikes, and walk with that Cord as far as the other Pike, and having thus taken the Distance between the two Pikes, of the Angles of the Shoulders, we hold it fast, advancing always inwards, till we be quite behind the Stick of the Perpendicular, and the Pike of the Angle of the Shoulder, where the Cord is tied. There we set up another Pike, which marks the Angles of the Flank and of the Courtin; and thus the Faces, Flanks, and Courtins are traced. Afterwards we tie a long Cord to one of the Pikes of the Bastion, and advance with it as far as the Picket nearest the Angle of the Shoulder, round which we turn once the Cord; then walk farther to the Picket nearest the Angle of the Flank and Courtin; then to the other Picket of the Flank and Courtin; afterwards to the other Picket of the Angle of the Shoulder; and lastly to the other Picket of the Angle of the Bastion, so that the Cord be always once turn'd round the Picket. In this Manner the Faces, Flanks, and Courtins will be drawn by a Line, as well as in Paper. At last we dig up, inside of that Cord, a small Ditch of the Breadth and Depth of half a Foot, the Pickets remain in their Place, but the small Sticks are taken

out with the Cord: The Process is the same for all Polygons.

If we were to begin by the Polygon, the Operation would be done sooner; but seldom the last Line closes the Figure as exactly as it should, unless the Engineer works with much Art, and with a very good Instrument. First the Polygon must be traced with two Pickets, on the Place chosen for that Purpose; then the immobile Dioptries of the Instrument are fixed on that Line, and with the mobile the Engineer searches 108 Degrees, as the Angle of the Gorge, or Polygon, or the regular Pentagon; and ordering a Man to walk, with a Picket in his Hand, directly to the same Point of Sight; then another is measured towards this, of the Station of the Instrument, of the length of the Polygon, as in the Pentagon, 90 Degrees, where a Picket is set up. Which done, the Instrument is carried to that Place, and the Engineer looks through the immobile Dioptries behind, over the Line he has traced last; then traces according to the Sight of the mobile Dioptries, the third Polygon, as before, and proceeds in the same Manner till the Figure be perfected; tracing the Faces, Flanks, and Courtins, as above directed.

But this first Manner of fortifying is but the old one of M. *Vauban*; his new Method is much more esteemed, as answering better the End proposed in the *Fortifications* of Places; and founded on the seven following excellent Maxims; viz. 1. The Defence of the Flank must be such, that both the Cannon and Musquetry may be used at one and the same Time. 2. The Flank ought to be so well cover'd, as to be not entirely ruined by the Enemy. 3. The Ditches, horizontally razed. 4. The Bastions are to be so contrived, that those who defend them may be shelter'd against the Bombs. 5. Some Places and Passages are to be contrived for the Sallies. 6. The greater is the Number of Ditches the better. 7. The Counterscarp must be well covered.

To reduce the first of these Maxims into Practice, M. *Vauban* makes his Flanks in such a Manner, that the Line of Defence may have 70 Yards; and because such a Thing is not practicable in the great Manner of fortifying, the interior Polygon having 100 Yards, M. *Vauban* never uses it but in Cases of Necessity.

To cover well the Flank, which is M. *Vauban*'s second Maxim, he places a good Ravelin before the Courtin, and contrives the Flank so, that two Pieces of Cannon, at least, may be hidden behind the Orillon, which cannot be seen by the Enemy, but when he attempts to make a Lodgment on the Breach.

To raze the Ditch, which is the third Maxim, M. *Vauban* will have made, under the Flank of the Tenaille of the Fausse-braye, Arches, under which Cannons may be planted on Carriages used for Ship's Cannons. The Embasures are shut, and never opened, but when the Enemy wants to cross the Ditch under the Face. There are also Arches made for three Pieces of Cannon, over-against the Ditch of the Ravelin.

M. *Vauban* has found three Means to shelter, as much as possible (according to his fourth Maxim) the Bastions against the Bombs; of Traverses, of the Separation of the Tenaille of the Fausse-braye, from the Body of the Place, by a Ditch, and of Vaults under the Ramparts.

To order securely Places and Passages for the Sallies, which is M. *Vauban*'s fifth Maxim, he intersects in several Places the Glacis of the Counterscarp with narrow Passages, garnished with three strong Gates, *enfilé*, or enfiladed, with Works; as *no*, fig. 9.

To oblige the Enemy to cross several Ditches, M. *Vauban*, according to his sixth Maxim, makes a great many Out-works; and even uses dry Ditches round the Glacis of the Counterscarp: As plainly seen in fig. 9.

To cover well the Counterscarp, which is the seventh Maxim, the same excellent Engineer has found three Expedients: First, he makes the Covert-way, of

so as to be always higher at the Points than at the re-entering Angles. Secondly, he makes the Parapet of the Counterscarp very high. Lastly, he uses Traverses near the Places of Arms. fig. 4.

As we have named at the Beginning of this Treatise the principal Angles of a Fortrefs, and given the Definition and Description of all the Parts there, we'll give the Method how to make every one of them, beginning by the Angle of the Bastion, or flanked Angle.

Several Engineers are of Opinion, that an obtuse Angle, in a Bastion, is preferable to an acute one; because the obtuse cannot be so soon defaced as the acute. Others say, on the contrary, that though it be very true, that 10 Yards are easier carried off from both Sides of an acute Angle, than of an obtuse, it does not follow hence, that the obtuse is preferable to the acute, and support their Sentiment by this Demonstration: Suppose, say they, we had before us two Angles, equally good and strong, both in Earth and Masonry, one of 60 Degrees, and the other of 120; the Question is, which of the two we could sooner destroy, so as to make a Breach of 18 Yards? We answer, that such a Thing can be done easier to that of 120 Degrees, than to the other which has but 60; since we are but to destroy to that of 120, a Line of 10 Yards on both Sides; and 168 cubick Yards of Stone and Earth, to make a Breach of that Breadth. Some say, that the obtuse Angle is preferable to the acute; because the one gives greater Flanks than the other. Others alledge, for reason of this Preference, that the obtuse Angle gives more room to the Bastion. Those who stand for the acute Angle, say, that the Enemy cannot so well extend his Batteries between two acute Bastions, as between two obtuse; and that therefore the acute Angle is preferable; provided, however, that there be Room enough on the Bastions and in the Fortrefs, that the Bastions be not too near one another, nor the Line of Defence too long. Therefore the best Manner is to make the perpendicular to the Polygon, from 15 to 20 Yards.

From this we'll pass to the *flanking Angle*, or of the Flank, and to the *Line of Defence*.

M. *Blondel* makes the *flanking Angle* obtuse; the Count *de Pagan*, and *Rufenstein* make it right; but most of the other Engineers make it more or less acute. M. *Vauban* causes his Orillon to make with the Line of Defence, an Angle somewhat acute; the re-entering Flank, an Angle a little obtuse; and that of the Tenaile of the Fausse-bray, a right Angle.

The *Line of Defence*, is that which represents the Course or Flight of the Bullet, of any Sort of Fire-Arms, more especially of a Musket-Ball, from the Place where the Musketeer must stand to scour, and defend the Face of the Bastion: There is a *Line of Defence sabbant*, and a *Line of Defence razant*.

The *Line of Defence sabbant*, is drawn from the Angle of the Courtin, to that of the opposite Bastion; without touching the Face of the Bastion: This must never exceed 800 Feet, which is reckon'd the Distance at which a Musket-Ball will do Execution.

The *Line of Defence razant*, is that drawn from the Point of the Bastion along the Face, till it comes to the Courtin; and shews how much of the Courtin will scour or clear the Face.

M. *Vauban* puts his first Flank on a Line of Defence of 70 Yards, and that of the Fausse-braye on a Line of Defence of 57 Yards.

As the Face is always attacked, and it is a very great Advantage for the Enemy to attack a Line of a large Front, the Faces should always be small; tho' if we consider, on the other Side, that the Faces of a Fortification are always the best Counter-Batteries, the large Faces should be the best, because they give more room to the Bastion: But however the Faces of 25 or 27 Yards, as those of M. *Vauban*, are always in a Condition to make a tolerable good Counter-battery; especially when provided with a risen Fausse-braye.

The FLANKS must be made large enough, and strong enough. A simple Flank can never be large enough, therefore a low one must be made near it: But that this may not be filled with the Earth, which falls from above, by the Violence of the Cannon of the Enemy, nor destroyed by the Bombs, it is absolutely necessary to make it at a reasonable Distance from the high Flank, and even to part it from it by a Ditch. Those two Flanks are large enough, provided both together be as large as the opposite Face.

A Flank can be made strong in several Manners. First, all Engineers agree, that it is apropos to re-inter one Part of the Flank towards the Bastion, and to cover it with the other Part, called the Orillon. Besides, it contributes much to the Strength of the Flank, that it should not be made in a right Line, but either angular or round, that the Battery of the Enemy being directed towards one of those Parts, should not touch the others, but in an oblique Manner.

It is also very proper, that the Flank should not be every where of the same Height; but it must be higher at the Angles of the Shoulder, always going in diminishing towards the Courtin.

From these we'll pass to the Out-works; beginning by the Ravelins, which must be made so strong that the Cannon may be play'd upon it boldly; therefore Care must be taken to make commodious *Departs* in the Ditch, that they may be easily and speedily carried away, in case the Work could be defended no longer. In Ditches full of Water, Boats must be kept ready for that Purpose, that in case the Enemy should force the Ravelin on both Sides, the Cannon may be saved. In dry Ditches Coffers are very good for that. The Ramparts of the Ravelins should be Roofed as much as possible. When the Ravelin is attacked, a Retrenchment ought to be made early with Pallisadoes, at least to facilitate the Retreat. The best Means is to build at first, Redoubts of Stone, and open on the Side of the Fortrefs, at the re-entering Angles of the Ditch of the Body of the Place.

Note, That *Coffer* denotes a hollow Lodgment athwart a dry Moat, from six to seven Feet deep, and from sixteen to eighteen Foot broad; the upper Part made of Pieces of Timber raised two Feet above the level of the Moat; which little Elevation has Hurdles laden with Earth for its Covering, and serves as a Parapet Embasures. The Coffer is nearly the same with the Caponiere, abating that this last is sometimes made beyond the Counterscarp on the Glacis, and the *Coffer* always in the Moat, taking its whole Breadth, which the Caponiere does not. It differs from the Traverse and Gallery, in that these latter are made by the Besiegers, and the *Coffers* by the Besieged, who generally make use of *Coffers* to repulse the Besiegers, when they endeavour to pass the Ditch. To save themselves from the Fire of the *Coffers*, the Besiegers throw up the Earth on that Side towards the Coffers.

The COUNTER-GUARDS, are very useful Works, if it be possible to make them with small Ramparts, all of Stone, according to the Method of M. *Blondel*; because they embarrass more the Enemy, after he has render'd himself Master of them, than they are useful to him; but if such a Thing is not practicable, the Engineer must take Care, at least, to make them so, that the Enemy may not find Room enough upon them to raise a Battery. He ought also to mind, that they may be parted, without Trouble, into several Pieces, at least above at the Point, where they are always to be higher, and lower on the Side of the Ravelin, which should receive some Defence from them, as they are defended from it; therefore it is proper to retire, according to M. *Blondel*'s Method, to the inferior Face of the Ravelin, and to put a Parapet in the empty Place.

To render the Polygons equal in Strength, nothing is more proper than the great and small LUNETTES, which can be added to those which are weaker. Besides,

sides there is no other Rule to be observed than that which relates to the Counter-guard. The *Lunettes* can either be made to defend the Counter-guard, or to be defended by it; though this last Manner is certainly the best. The small *Lunettes* are defended by the Ravelin; and the great *Lunettes*, like the Ravelin, are defended by the Face of the Body of the Place. But as it is an indisputable Maxim, that each Like must have its second Particular, it is better, according to the Method of M. *Coeborn*, to close them on one Side, by Flanks, that they may defend themselves.

The HORN-WORKS, or CROWN-WORKS, are very proper to fortify a Suburb; which, otherwise, the Besieged are forced to abandon, and destroy, when the Place is attacked; for those Works are not so good as Redoubts of Stone, to occupy and inclose a Height; for they require a vast Number of Men to be well defended.

Before an Engineer has entirely finished the Body of the Place, he must take a particular Care to make a very good COUNTERSCARP, since it is of a very great Use for the Defence of a Fortress. To make a very good *Counter-scarp*, the *Covert-way* must be very large; Room must be left to put Pallisadoes, at the Places which are attacked; the Points of the *Counter-scarp* ought to be cover'd with Bonnets; they must be mined; there must be Caponieres at the Angles, to shelter the Soldiers; Places of Arms well covered; a good Conveniency to make Sallies; it should be easily separated into several Parts; and it would be very proper to make it in such a Manner, that some Pieces of Cannon may be easily planted upon it. A *Counter-scarp*; with all these Advantages, would not cost so much as a few Out-works; though it could be capable so to fatigue an Enemy, that but very little Strength would be left him for the Attack of the Body of the Place: Because the *Counter-scarp* has this Advantage over all the other Works, that it cannot be ruined by the Cannon of the Enemy. Whence the three best Engineers, *Vauban*, *Rimpler*, and *Coeborn*, have used all their best Endeavours to strengthen this Part of the *Fortification*.

A RAMPART, all entirely of Earth, without Countermines, or Arches, is good for nothing.

A PARAPET must be of Earth, but very hard and tight, interwoven with Twigs; it should have Embasures, also interwoven with Twigs: But that Interwoving ought not to be all of a Piece, for Fear some Mischance should happen to the Parapet by Fire, or some *Ebralement*. Besides, those Edges are very commodious to repair the Breaches of the Parapet with *Sacks a Terre*, or Fascines. They are also very advantageous to the interior Talus of the Parapet, and much more than if it was lined with Stone. Small Traverses should be made to the *Merlons*, in M. *Rimpler's* Manner, which form almost small Embasures for the Musqueteers. It would be proper to have Beams ready in the Magazines, to join them immediately to the Parapet, and line them with green Turfs, the better to preserve the Garrison: And at the Ramparts lined with Stones, there should be a Berm on the Outside before the Parapet, to hinder the Earth beaten down by the Cannon, from falling into the Ditch. At the Flanks, if there be Room enough in the Bastion, there should be a double Parapet, leaving a Space between to place the Cannon, and making one a little lower than the other.

The Ditch should be lined with Stones inward and outward. It is in vain to dispute which is the best, a Ditch full of Water, or a dry one; since it is not in the Power of an Engineer to chuse; otherwise it is without question, that a dry Ditch, which can be filled with Water at Pleasure, is the best. But as this Advantage is not found every where, and an Engineer being obliged to make use of a Ditch full of Water, as of a dry one, according to the Situation of the Place, he rather minds how to correct the Imperfections found in both; taking Care to facilitate the Sallies, in Ditches full of Water as well as in dry ones.

Where the Water is from 7 to 8 Feet above the Horizon, there will be beautiful Ditches, if they be made 10 Yards broad, and 8 Yards only near the Body of the Place, but towards the Covert-way, they should remain dry, at two Yards in Breadth: As it may be seen fig. 9.

There are besides these great Works, some small ones, auxiliary to the Construction, as the *Caponieres*, *Bonnets*, *small Ditches of Separation*, the *Blochs's*, and the *Traverses*.

The CAPONIERES is a covered Lodgment, sunk four or five Foot into the Ground, encompassed with a little Parapet about two Foot high, serving to support several Planks covered with Earth. The *Caponiere* is large enough to contain fifteen or twenty Soldiers; and is usually placed in the Glacis, on the Extremity of the Counter-scarp, and in dry Moats, having little Embasures for the Soldiers to fire through.

Note, That *Embrasures* denote the Holes, or Apertures, through which the Cannons are pointed; whether in Casemates, in Batteries, or in the Parapets of Walls. The Embasures are generally about 12 Foot a-part, from 6 to 9 Foot wide about, and two or three within. Their Height from the Plat-form is usually three Foot on the Inside, and a Foot and a half on the Outside; that so the Muzzle, on occasion, may be sunk, and the Piece brought to shoot low. They are sometimes called *Cannonieres*, when big enough to pass the Mouth of a Cannon through; and *Meutriers* when only big enough for Muskets. When the Parapet is so low that the Cannon may shoot without *Embrasures*, it is said to shoot *en barbe*.

The BONNET is a kind of little Ravelin, without a Ditch, having a Parapet three Foot high; antiently placed before the Point of the salient Angles of the Glacis; being pallisado'd round: Of late also used before the Angles of Bastions, and the Points of Ravelins, and Fausse-brays; in fig. 8. *m*. The *Bonnet* has two Faces, from ten to fifteen, or more Rods long: The Parapet is made of Earth, from thirty to thirty-six Foot thick, and from nine to twelve Foot high: It is environed with a double Row of Pallisadoes, ten or twelve Paces distant from each other; hath a Parapet three Foot high, and is like a little advanced Corps de Guard.

The Pallisadoes, small Ditches of Separation, and the Caponieres, are good to stop the Enemy, that the Besieged may not be forced to quit a Post all at once, but dispute it by Inches with the Enemy. The Bonnets are very commodious to keep the Works from being enfiled, and to manage every where Places for secure Corps de Guard. The Traverses and Caponieres, shelter the Garrison from the Bombs and Grenades. The Blochs's are proper to carry small Cannon to Places, where the Enemy suspects it the least; and thereby his Approaches can be enfiled, and his Works opposed vigorously. Lastly, these small Works, which can be made at a very little Expence, are capable to defend for a long Time, an ill fortified Place, and to annoy the Enemy in several different Manners.

Note, That for an Example of the fundamental Rules above-described, there will be found in the Plate, fig. 9. A. a Design to fortify in the Manner of M. *Vauban*; with a new Ordinance of a Fausse-bray before the Face, and a particular Manner of covering the Ravelin.

A CITADEL is also a Fortress, composed of all the Works above-mentioned; but as they are ordered in a particular Manner, we'll join here the general Rules, and particularly of that Ordinance, and reduce them into Practice.

Note, That a Citadel, fig. 8. is a Fort, or Place fortified with four, five, or six Bastions, built sometimes in the most eminent Part of a City, and sometimes only near

near the City. In the first Case the *Citadel* serves to defend the City against Enemies; in the latter it serves to command it, and to keep the Inhabitants in their Obedience: For which Purpose the City is left *unfortified* on the Part towards the *Citadel*; but the *Citadel* is *fortified* towards the City. The most usual Form of *Citadel* is that of a Pentagon, a Square being too weak, and a Hexagon too big.

The general Rules for *Citadels* are these: 1. The most exalted Place must be chosen for a *Citadel*: 2. If the City be provided with a navigable River, the *Citadel* must be situated at the Influxion: 3. The River disembouging into the Sea, it is best to place the *Citadel* at the Mouth of the River: 4. In case the *Citadel* could not be built on the most eminent Place of the City, the Eminence must be so near the *Citadel*, that it may be joined to it by a Line of Communication, and be separated from the City: 5. The *Citadel* ought to be so well fortified towards the Country, that the Enemy may find more Difficulty to attack it on the outside, than he would have to attack it on the inside after the taking of the City: 6. There must be a large Esplanade between the *Citadel* and the City: 7. It must have two Gates, one towards the City, and the other towards the Country.

To trace such a *Citadel*, there must be made first, an exact Ichnography of the City and of all its *Fortifications*; after which is drawn on a Paper one Part of the Design of the *Citadel*, whose interior Polygon must have no less than 80, nor more than 90 Yards. We take it afterwards, cut it all around, and put it on the Ichnography of the City, turning it from Side to Side till we find it well plac'd: Then we mark that Design with small Points, and make the whole Plan, but with Colours different from those of the City, that we may easily know what must be demolished of the Fortrefs. Care must be taken besides, that the two last Lines of the *Fortification* of the City near the *Citadel*, may not be opposite to it, but easily enfiled by it.

From this we'll pass to the *irregular Fortification*, which is practised especially in three Cases: 1. When a *Fortification* is to be made in a Place, which does not allow a Regularity in the Design. 2. When a City irregularly built, must be fortified. And 3. When old *Fortifications* are to be corrected.

In the first Case the *Fortification* of the exterior Polygon inside, is the most commodious. In the second it is best to fortify the interior Polygon outwards. In the third Case the Body of the Place must be left as it is, according to M. *Vauban's* Custom.

Places on Rivers are also fortified in a particular Manner, and in this Case an Engineer must mind not to make too many Works, nor too few. Simple Lines in form of Tenaille without Flanks, as it is seen at *Dresden*, are not sufficient; tho' it be not necessary to build whole Bastions on the River's side; therefore it is best to make ordinary Bastions, whose Polygons and Faces ought to be larger, and the Flanks smaller than usual; which is done in Proportion to the Breadth and Depth of the River.

If there be a Bridge over the River, a small *Fortification* must be plac'd beyond, and before it; and the best for that Purpose is half a regular Hexagon, whose Polygon must have from 50 to 70 Yards. In Case there should be an Island in the River, before the City, the Bridge must be carried upon it, and the *Fortification* adjusted before the Bridge, that it may be fired from the Island, by Means of Batteries made on Purpose.

The small Flanks of such *Fortification*, of a City on a River, can very well be double; and in that Manner it suffices, that one could put three Cannons abreast, taking a particular Care to place those Cannons in Vaults under the Rampart, which razes the River horizontally.

If the River runs through the City, the *Fortification* must be order'd in such a Manner, that a Bastion may touch each Side of the River with its Flank, and the River run through where the Courtin should

be; and a Courtin should even be made, with Arches, over the River. It is also necessary to raise, out of the City, Out-works on both Sides of the River, which should raze it cross-ways: But in Case the River should be so wide, that the Out-works on both Sides could not reach one another (though Rivers of such a Breadth seldom run through a City) a Work ought to be erected in the Middle of the River. At large navigable Rivers it is best to inclose the principal Part of the City towards the River with a Rampart, and part it from the other, as a different Town. In this Manner the *Elbe* passes between the old and new City of *Dresden*.

The Waters of small Rivers being necessary for the Mills of the City, and being stopt for that Purpose with Dikes, such Dikes are commonly made in the Ditch, which are of a double Use; for first, they hinder the Waters, which are round the City, from running, without passing through the Mills of the City; and secondly, the Ditches are, thereby, always kept in a good Condition. It must be observed, that those Dikes are to be placed at the Point of the Bastions, for fear the Enemy should make use of it; though others are of Opinion, that they are better placed before the middle of the Courtin; because the Reason why the Enemy seldom attacks the Point of the Bastion, is, that he would be obliged to cover his Passage with Sides, which would be too difficult; but if he finds there a Dike to cover himself with, he will make no Difficulty to fasten himself to the Point, where the Musketeers cannot so well fire, as at the Bottom of the Face.

There is also a particular Manner of fortifying Places, situated on Eminencies.

The Cities which are situated on Hills, as *Mons* and *Straßbourg*, are much exposed, because neither the Houses nor the Streets can be covered by the *Fortifications*; though, without this Inconveniency, such Places are very proper to be fortified; but the *Fortifications* on a Mountain ought to be made very high at the Bottom, and come sloping down, for fear they should be enfiled. If the Lines are so long, that they must be raised at the Bottom, it is best to make them by Degrees, covering them with Parapets and Traverses.

None but small Forts and Citadels are built on high Rocks, because of the Narrowness of the Space. The best Method is to adapt, as much as possible, the Lines of the *Fortification*, to the Sides and Figure of the Mountain; the Ramparts must be made low; and as the Ditches are commonly dry, the best Defence must be made at the Bottom. The Road to the Fortrefs must have from Distance, in Distance, Retrenchments very well defended. The Engineer must also take Care to make all Sorts of Works, whence the Foot of the Mountain can be beaten most, they ought to be disposed in such a Manner, that those who defend them may retreat from them in Safety, and annoy, without Interruption, the Enemy, when he has render'd himself Master of them.

Against the Eminences, which are near a Fortrefs, there should be erected not only good Ravelins on the Ramparts, but those Eminences themselves should also be fortified, by Works capable to resist the Enemy; without, notwithstanding, proving advantageous to him when he has render'd himself Master of them; which can be done in this Manner: At the highest Place of the Mountain is drawn a Line, of the Height and Thickness of a Parapet, so that it may be enfiled by the Cannon of the Fortrefs. Farther towards the Fortrefs, where the Mountain grows lower, are erected Redoubts of Stone, which are open on the Side of the Fortrefs, and distant from one another of a Musket Shot; and contrived so low that they should raze the Mountain. Taking Care besides, lest the Enemy should cut the Retreat into the Fortrefs to the Soldiers, who are lodged on those Redoubts, or annoy them with his Cannon.

To correct and strengthen old *Fortifications*, an Engineer should be very cautious in not demolishing of the

the Works already erected, but as little as he can; and avoid adding any Thing to the Rampart of the Body of the Place, unless when those Works are very old, or the Faces of the old Bastions have but little Defence.

The Gates, Stone Dikes, and the Sluices, are not to be changed, because such a Thing could not be done without vast Expences, and changing the Gates proves often very detrimental to the Inhabitants.

If the Out-works have not a good Defence, other Works must be added to them, or another Form given to the old ones; and as commonly the Profiles of the Out-works of old Fortifications, are too weak, the Ditches must be made larger, and the old Works strengthened with the Earth taken out of them. In old Fortifications, the Covert-way to the Counterscarp being too narrow, it must be made wider and stronger.

The Bastions being so far distant from one another, that the Courtins have 60 Yards, or more, the best Way is, to make semblable Bastions in the Middle of the Courtin.

But as this is better represented by an Example, there may be seen, fig. 19. B, a Plan, where the chief Works of the City and Citadel, have been left untouched; except that to the Courtins of the Rampart of the City, the Parts *a b c d* have been retired to have Places. The Out-works have also been left as they were in the old Fortification, except that the Retrenchments, which were good for nothing, have been taken from the Horn-works B C, the Out-works A E E, are also at the old Fortification, but the Profile has been strengthened. The Ravelin K, is only a little changed in the Figure. But most of the Out-works of that old Fortification, are situated in such a Manner, that it cannot be easily fir'd from one into the Ditch of the other, because of the great Pieces of Earth which are between; it is what has been a little corrected, by Means of some other Works added to them. Lastly, three Ravelins in *p e g*, are entirely taken off, and changed with other new Works much stronger.

Therefore the new Works consist in five great, and thirteen small Works, viz. two detached Bastions, *g K*, three great Horn-works, *o p z, e e*, five Ravelins, *q i b, f I*, four Lunettes, *l n u x*, and four Counterguards, *r s t m*; this Sort of Defence, is, in the Opinion of most Engineers, the most subtle.

A Fortification, according to the Dutch Method, is that which making the Flank perpendicular to the Courtin, makes the Flank subduple of the Face, and and subtriple of the Courtin; and the Angle of the Bastion equal, either to two-thirds of the Angle of the Polygon, or to half thereof, with the Addition of fifteen or twenty Degrees, to make it equal to a right Angle. *Freitach* determines the Quantity of the Flank in a Square to be six; in a Pentagon, seven; in an Hexagon, eight; in an Heptagon, nine; in an Enneagon, ten; in a Decagon, eleven; and in all other Figures, twelve *Rhineland* Perches: Consequently the Face twenty-four, and the Courtin thirty-six Perches.

To draw the Profile of a Fortification, after the Dutch Manner, we must draw the inner Polygon G H, fig. 4. into five equal Parts; the Demi-Gorge A H, is to contain one of them, and the Capital H C, two; then divide the Courtin E H into four Parts, and make the Flank A B, one. But the French make both the Demi-Gorge and the Flank, a sixth Part of the Polygon; and in Squares and Pentagons, setting aside the second Flanks, describe a Semicircle upon B S, that the Angle of the Bastion C, may be a right Angle. The Italians giving the same Dimensions to the Gorge and Flank, make the secondary Flank half the Courtin, in Polygons, exceeding a Hexagon, and a third of the Courtin in the rest. Lastly, the Spaniards giving the same Dimensions to the Flanks, omit the secondary Flanks. But Flanks perpendicular to the Courtin, with secondary Flanks, are in Disrepute, on Account of the Obliquity of the Defence;

so that the Dutch Method of fortifying, with the other antient ones, founded on the same Principles, are now out of Doors.

The Fortification, according to Count Pagan's Method, supposes, in the larger Fortifications, the external Polygon A B, to be 100, the Face A G, 30 Perches; in the smaller, the first 80, and the second 25; and in the middle Size, the first 90, and the second 27½: The Perpendicular C D, 15; and the Flanks G F, and H E, perpendicular to the Lines of Defence A F and B E, covered with an Orillon, and three-fold: To which add a Ravelin and Counterguard to serve for Out-works. This Method was received with great Applause, and must be allowed greatly preferable to the Dutch Method. But it has its Defects; for besides that the fortifying of Places by it, is very expensive, its triple Flank is too close, so as to be exposed to the Violence of the Bombs; the Orillon is so large as to prejudice the Length of the Flanks; the outer Rampart of the Bastion is too big, &c.

M. Blondel's Method, has a great Affinity with that of the Count Pagan, only that the Quantity of the Angles and Lines are differently determin'd, Thus a right Angle being subtracted from the Angle of the Polygon, and to a third Part of the Remainder fifteen added; the Sum gives the diminished Angle. In the greater Fortifications, the outer Polygon is one hundred, in the smaller eighty-five. The internal Polygon being divided into ten Parts, seven of them give the Lines of Defence, and the Faces are half those of the Tenaille. This Method is very well calculated for the Purposes of Architecture, only being somewhat expensive, it is but little us'd.

Scheiter, in his Method of Fortification, supposes, the external Polygon, in the larger Fortifications, to be 100 Perches; in the middle Size, 90; in the lesser, 80; the Flanks perpendicular to the Lines of Defence: And the Lines of Defence in the greater Fortifications, 70 Perches; in the middle Size, 65; and in the lesser, 60. It detaches Bastions from the Courtin, and forms a Kind of inner Recess behind the Courtin; it assumes the Angle of the Bastion in a Square, to be 64 Degrees; to this adding eight, the Product is the Angle of the Pentagon; to which adding six Degrees, the Sum is the Angle of the Bastion in an Hexagon, and adding five to this, the Sum is the same Angle in an Heptagon.

Having thus given all the best Rules to fortify Places, according to the different Methods of the best and most modern Engineers, I'll take once more my Marechal's Staff (which I had laid down, ever since I had the Honour to appear in Steel at the Head of an Army) and march to besiege some Town or other; but before we invest a Place, we must be inform'd of its Strength, viz. if it be strong of itself, or by Reason of the Easiness of throwing Succours into it. If it be strong of itself, it must be so either by Nature or Art.

Places are strong by Nature, when they are difficult of Access, either by being seated on a Morass, or by being enclosed with Rivers, or Waters; as Lakes, or Part of the Sea which cannot be waded through; and if they are not frozen in Winter, it is a great Advantage to the Place. They are also strong when they are seated high, with steep and rocky Avenues; especially if the Rocks are difficult to be undermined; or where there is no Water or Forage near, and consequently great Armies cannot continue long about them. Again, Places are strong when the Army that attacks it finds it difficult to bring their Convoys, or to carry on their Trenches when the Ground is stony, or when there is a loose Sand, or that there is no digging without meeting Water; or else when the Place is encompassed with high Mountains, which are full Cannon-Shot from it, and therefore the Circumvallation must be carried a great Way about; or so seated that the Lines cannot be carried up to the highest Part of them, and then they who come to relieve the Place, will command the Besiegers Lines. Places are also reckoned advantageous, when there are no Valleys,

Valleys, hollow Ways, Ridges, Hillocks, Trees, Hedges, or Houses, within Cannon-Shot, that can favour the Approaches: If there are Houses or Villages, they must be burnt down immediately.

The Strength which Places may receive from Art, consists in the Manner of the *Fortification*; as we have already mentioned.

Besides the *Fortifications*, the Strength of a Place consists in the Ammunition, Provision, and Cannon, they are stored with; in the Facility of making Retrenchments; in the Number of Troops, and their Valour; in the Capacity of the Governor and other Officers; and in the Unity of the Garrison among themselves, and with the Inhabitants.

Being thoroughly inform'd of the Condition of the Place, we must consider next, whether we have, or can have, Men, Provisions, Ammunition, and Money, which will be requisite as long as the Siege shall hold; and whether while we attack that, the Enemy may not besiege another of a greater Consequence.

Being resolved to attack the Place, we must march with all the Expedition we can to surprize it, and prevent, if possible, any Succours from being thrown into it. If our March be long, and we fear the Enemy may get Intelligence of our Design, by our marching directly towards it, and so have an Opportunity to supply it with what is necessary for its Defence; we must then strike out of the Road, and endeavour to make the Enemy believe we design to lay Siege to some other Place, detaching a Part of the Army to invest the Place, which we really intend to besiege, and hasten to join them as soon as we can judge them to be before the Place.

The Major-General, or other Officer, who commands the Body that goes to invest it, at about a League distant from the Place, shall detach two or three Parties of Horse or more; and each of those Parties must be stronger than those that can come out of the Garrison; they are to ride up as near the Outworks as possible, to hinder any Thing whatsoever from getting in. When the Major-General is come up, he must post himself between the Place and that Side, whence it is most likely the Succour may come; and if he takes any Prisoners, he shall enquire what Numbers are in the Place, as well Soldiers as Inhabitants, and Peasants of the adjacent Parts, and what Provision and Ammunition they have. He must also enquire if they had Notice of the Siege, how long since, what Succours they expect, and which Way they are to come. He must send out small Parties upon the Discovery, and to his General, to inform him what Intelligence he has got, and divide or keep his Forces together, according to the Notice he has received: As for Example, if the Enemy are marching towards him with equal Strength, or little inferior to him, he shall keep in a Body; and if he can be sure which Way they design to throw in Succours, he must march a little Way to meet them, lest they slip in by some other Passage, than that which he guards.

It is better to fight a strong Party, that comes to throw itself into a Place, at a Distance, than near to it; for though we should defeat them near the Place, yet some of them may get into it; whereas if we fight them at a Distance, it is easier to prevent those that run-away from escaping to the Garrison. If the Major-General thinks he shall not stand in Need of all his Troops, he may leave some near that Place, to prevent any, especially Officers, from throwing themselves into the Garrison, in the Confusion which is often even among victorious Troops.

If the Major-General is so uncertain which Way the Enemy will march, that he thinks it best to keep near the Place, and always have Parties abroad to discover their March, and at Night shall be within Cannon-shot of the Place, in one or two Bodies, according to the Intelligence he has received. He must continue under Arms all Night, and not suffer his Troops to have above half Rest in the Day till the General comes. He shall go round the Place, and view the Avenues

by which Succours may come, and the *Fortifications*, and which Side is easiest to be attacked; and what Places are properest for the Quarters, and to draw the Circumvallation, that he may advise and inform the General.

When the General is at hand he must send a Party to advertise the Major-General; and a Person of Capacity to bring back an Account of all that has happened; and finding all Things are well, he shall advance at the Head of the Army, and go himself and view where he is to settle the Quarters; the Major-General shall meet him a little Way, and tell him all he knows; and as the Forces come up, the General is to send them Orders where to encamp.

It is not easy to fix the Quarters the first Day for the whole Siege, and what Number of Troops is to be in each of them; therefore the General shall go round the Place, or part of it the next Day, to view it, attended by the general Officers and Engineers, and having called a Council of War, resolve what Quarters to take, what Number of Troops each Officer that commands in them is to have, where the Attacks are to be made, and Bridges laid if there be a River, to secure a Communication.

The Considerations to be had in the Choice of the principal Quarters, are to observe which Way the Enemy may come to the Relief of the Place, and where the Attacks are to be made, to the End that the main Quarters being at hand, may relieve them in case of Need, and with more Ease send out the Guards of the Trenches, and carry the Ammunition and other Things necessary for the Attacks; and that the General Officers may with more Ease go into the Trenches, and back to the Quarters. The Convenience of Covert, Forage, and Water both for Men and Horses, are to be considered.

After distributing the main Quarters, there are some small ones posted between them, according to the Circumference of the Place, and the Number of Avenues there are to it. But if it may be thought that considerable Succours may arrive before the Lines are finished, then the Army shall be divided only into two or three Parts, lest the lesser Quarters might be cut off; but when the Lines are compleat, there shall be several of them posted about, so that if they are attacked on a sudden, where they are remote from the main Quarters, they may have speedy Succour.

The next Thing a General ought to do, is to view and judge of the Side where the Attacks are to be made; considering that the Facility of an Attack depends on the Weakness of the Place, or in the Facility of making Approaches. The Weakness consists in the Flanks being least flanked, ill-faced, not well terraced, least capable of retrenching within, not well ditched, and less covered without with detached Works and Covert-works.

The Facility of approaching consists in hollow Ways, Bottoms, deep Valleys, Ditches, Ridges, and the Facility of throwing up the Earth; or in having Hillocks, or small Eminences, which serve to plant Cannon to Advantage; or in higher Grounds, which overlook and command the Place, either with Cannon, or small Fire-Arms; and in the Nature of these commanding Places, that is, whether they are directly fronting, or which is least dangerous, reverse; that is, playing on the Back of a Post, or Enfilading, which sweeps quite along it.

If those Parts of the Place are best fortified, where the Approaches are easiest, and the weakest are more difficult of Access; then in chusing the Attacks, the Advantages and Disadvantages on both Sides, are to be weighed: But in a great Siege, the Faults in the *Fortifications* of a Place generally turn to better Advantage, than the Facility of making the Approaches, especially when the Garrison is strong.

When the General has resolved upon the Places for carrying on the Attacks, the Engineers must go again to take a more strict View of them, both as to the Ground they are to be carried through, to make the best Advantage of it; and to see whether there

there are Ridges, Hedges, or Ditches, to run the Trenches along them; if there are any Dales or Hollows, to make use of them for Places of Arms; to contrive the Situation of the Redoubts, so that they may defend the Trenches, and look down into the said Deeps and Hollows; and tho' the Way be longer by those Places, than if the Trenches were carried along the Plain, yet it is generally safer for taking the Advantages that lie in the Way. If a General can get a Plan of the Place, it will contribute much to the Facility of taking it.

At present we must enter into a Detail of all the Works made for the Attacks, by Means whereof we approach the Place, and force it at last to surrender. Those Works are generally understood under the French Name of *Trenches*, and consist in *Places of Arms*, *Approaches*, *Boyaux*, and *Ditches of Communication*, *Batteries*, *Lodgments*, *Saps*, *Galleries*, &c.

A PLACE OF ARMS, in a Siege, is a spacious Place covered from the Enemy, by a Parapet, or Epaulment, where the Soldiers are posted ready to sustain those at Work in the Trenches, against the Soldiers of the Garrison.

APPROACHES, or *Lines of Approach*, are particularly used for Trenches dug in the Ground, and their Earth thrown up on the Side next the Place besieged; under Shelter or Defence whereof, the Soldiers may approach, without Loss, to the Parapet of the Covert-way; and plant Guns, &c. wherewith to cannonade the Place. The *Lines of Approach* are to be connected by Parallels, or Lines of Communication. The Besieged frequently make *Counter-Approaches*, to interrupt and defeat the Enemies *Approaches*.

BOYAU is a Branch of the Trenches, or a Line, or Cut, which runs from the Trenches to cover some Spot of Ground; being drawn parallel to the Defence of the Place, that it may not be enfiladed, that is, that the Shot from the Town may not scour along it.

A BATTERY (of the French *Battre*, to beat, strike) denotes an Eminence cast up, whereon to plant Artillery, that it may play to better Advantage. In all *Batteries*, the open Face to put the Muzzles of the great Guns out at, are called *Embrasures*, and the Distances between the *Embrasures*, *Merlons*. The Guns are generally twelve Feet distant from one another, that the Parapet may be strong, and the Gunners have Room to work. The *Battery* of a Camp, is generally surrounded with a Trench and Palisades at the Bottom, as also with a Parapet on the Top, having as many Holes as there are Pieces of Artillery, and two Redoubts on the Wings, or certain Places of Arms, capable of covering the Troops which are appointed for their Defence.

There are different Sorts of *Batteries*, viz. *sunk*, or *buried Batteries*, *cross Batteries*, *Battery d'Enfilade*, *Battery en Echarpe*, *Battery de revers*, *Battery Joint*, or *par Camarade*, and *Battery en rouage*.

SUNK, or BURIED BATTERY, is that, whose Platform is sunk or let down in the Ground, with Trenches cut in the Earth against the Muzzles of the Guns, to serve for *Embrasure*. This Sort, which the French call *Batterie enterree*, and *ruinate*, is generally used upon the first making Approaches, to beat down the Parapet of the Place.

CROSS BATTERIES, are two *Batteries*, at a considerable Distance from each other, which play a-thwart one another at the same Time, and upon the same Point, forming right Angles; where what one Bullet shakes, the other beats down.

BATTERY d'Enfilade, is one which sweeps the whole Length of a strait Line, a Street, &c.

BATTERY en Echarp, is that which plays obliquely.

BATTERY de revers, or *murdering Battery*, is one that plays on the Back of any Place; and being placed on an Eminence, sees into it.

BATTERY Joint, or *par Camarade*, or *Carmaretta*, is when several Guns play at the same Time upon one Place.

BATTERY en rouage, is that used to dismount the Enemies Cannon.

LODGMET, is a Work cast up by the Besiegers, during their Approaches, in some dangerous Post, which they have gained, and where it is absolutely necessary to secure themselves against the Enemies Fire; as in a Covert-way, in a Breach, the Bottom of a Moat, or any other Part gained from the Besieged. *Lodgments* are made by casting up Earth, or by Gabions, or Palisades, Wool-packs, Fascines, Mantellets, or any Thing capable of covering Soldiers, in the Place they have gained, and are determined to keep.

Note, That *Gabions* are large Baskets, made of Osier Twigs, woven of a cylindrical Form, six Foot high, and four wide; which being filled with Earth, serve as a Defence, or Shelter from the Enemies Fire. They are commonly used in *Batteries*, to screen the Engineers, &c. in order to which, one is placed on either Side each Gun, only leaving Room for the Muzzle to appear through. There are also a smaller Sort of *Gabions*, us'd on Parapets, Trenches, &c. to cover the Musqueteers; being placed so close, as that a Musket can but just peep through. They also serve as a Parapet on Lines, Lodgments, &c. where the Ground proves too hard to dig into. To render the *Gabions* useless, they endeavour to set them on Fire, by throwing pitch'd Faggots among them.

Fascines, are small Branches of Trees, or Bavins, bound up in Bundles; which being mixed with Earth, serve to fill up Ditches, to screen the Men, make the Parapets of Trenches, &c. Some of them are dipped in melted Pitch or Tar; and being set on Fire, serve to burn the Enemies Lodgments, or other Works. A pitch'd *Fascine*, is a Foot and a half about: A *Fascine* for Defence two or three Foot.

A Gallery is a cover'd Walk, or Passage made across the Ditch of a Town besieged, with Timber fasten'd on the Ground, and plank'd over. The Sides of the *Gallery* are to be Musket-Proof, and consist of a double Row of Planks, lin'd with Plates of Iron; and the Top is sometimes covered with Earth, or Turf, to hinder the Effect of the Stones, artificial Fires, &c. of the Enemies. *Galleries* are chiefly used to secure and facilitate the Miner's Approach to the Face of the Bastion, over the Moat, which is already supposed to be filled up with Faggots and Bavins, and the Artillery of the opposite Flank dismounted: Sometimes it is called a Traversé. The *Gallery* of a Mine, denotes the Branch, or that narrow Passage under Ground, leading to a Mine, carrying on under any Work design'd to be blown up. The Besiegers, and Besieged, do each of them carry *Galleries*, or Branches under Ground, in Search of each other's Mines, which sometimes meet and destroy each other.

Epaulment, is a Side-work hastily thrown up, to cover the Cannon or the Men. It is made either of Earth thrown up, of Bags filled with Sand or Earth, or of Gabions, Fascines, &c. with Earth, of which latter Sort, the Epaulments of the Places of Arms for the Cavalry, behind the Trenches, usually are.

Mantelets, are a Kind of moveable Parapets made of Planks, about three Inches thick, nailed one over another, to the Height of almost six Foot, generally cas'd with Tin, and set upon little Wheels; so that in a Siege, they may be driven before the Pioneers, and serve as Blinds to shelter them from the Enemies small Shot. There are other Sorts of *Mantelets*, covered on the Top, whereof the Miners make use to approach the Wall of a Town or Castle.

Mine, is a subterraneous Canal, or Passage dug under the Wall, or Rampart of a *Fortification*, intended to be blown up by Gunpowder. The Alley or Passage of a *Mine*, is usually about four Foot square; at the End of this is the Chamber of the

Mine, which is a Cavity about five Feet in width and in length, and about six in height; and here the Gun-powder is bestowed. The *Saucisse* of the *Mine* is the Train; for which there is always a little Aperture left. There are various Kinds of *Mines*, which acquire various Names; as royal *Mines*, serpentine *Mines*, forked *Mines*, according as their Passage is strait, oblique, winding, &c. They are either dug within the Body of the Earth, as those made by the Besieged to blow up the Works of the Besiegers, before they make a Lodgment on the Covert-way; or in Eminences and rising Grounds, as to make a Breach in the Ramparts, or to blow up Walls, &c. To prevent the Effect of *Mines*, the Besieged sink a Well or Pit, and a Gallery, till it meets the Enemy's *Mine*, and this is called *Counter-Mine*.

Sap, denotes a Work carried on under Ground, to gain the Descent of a Ditch, Counterscarp, or the like. It is perform'd by digging a deep Trench, descending by Steps from Top to Bottom, under a Corridor; carrying it as far as the Bottom of the Ditch when that is dry, or the Surface of the Water when wet. When the Covert-way is well defended by Musketeers, the Besiegers make their Way down into it by sapping. When they are got near the Foot of the Glacis, the Trench is carried on directly forwards; the Workmen covering themselves with Blinds, Wool-packs, Sand-bags, and Mantelets upon Wheels. They also make Epaulments or Traverses, on each Side, to lodge a good Body of Men. The *Sap* is usually made five or six Fathom from the salient Angle of the Glacis, where the Men are only cover'd sideways; for which Reason they lay Planks over-head with Hurdles, and Earth above them. When they have forced the Enemy to quit the Covert-way, the Pioneers immediately with Sand-bags, Wool-packs, or other Fences, make a Lodgment, and cover themselves as well as they can, from the Fire of the opposite Bastion.

Thus informed of almost all that is necessary to carry on the Siege, we'll open the Trench, from 800 to 1000 Paces of the Counterscarp; tho' this is not a general Rule; (for sometimes it is better to open it as near the Place as possible) there must be prepared, from the very Beginning, at the Tail of the Trench, a Place of Fascines, Sacks of Earth, and the like, for a secure Retreat against the Cannon of the Place, for those who cover the Works, who are most Cavalry, for the Infantry is commanded to the Approaches; hence a Trench is dug, four Feet deep, and which has, at the Beginning, but four or six Feet in width; the Earth being thrown up on the Side of the Place. That Trench is seldom made longer than 40 Yards, and always made in the Night; taking all the Precautions imaginable to hinder it from being enfiladed, either from the Place, or from the Counter-Approaches, the Besieged could build.

The next Day shall be spent in enlarging the Trench, made at Night, to six or eight Feet, if possible, and to raise the Covert of the Place of Arms for the Horse. The Guard of the Trenches is first to be weak in Foot, and strong in Horse, especially in the Day-time, and in a plain Country. The first Day there should not be above fifty or sixty Foot, with a Captain and a Lieutenant, left at the Head of the Workmen; but the Guard ought to be made so strong of Horse, that there should be nothing to fear: The Advantage is, that the Horse may keep at a great Distance from the Place, and yet come up Time enough to relieve the Trenches, if the Enemy falls; whereas the Foot, who cannot march so fast, would be obliged to stand within Falconet Shot of the Place: But it is very rare to find a Plain so open, that there is no Place to put the Foot under Covert, at least if they lie flat; but yet the Foot should be spared as much as possible the first Days, and a small Number be put upon Guard, being always much

more fatigued in a Siege of any Continuance than the Horse.

A small Redoubt must be made the second Night, a small Musket-Shot from the Garrison, and a Trench drawn from the Place of Arms of the Horse to the Redoubt, and in the midst of it a Place of Arms for the Foot, which will serve only for the first Day of the Siege, as is usual in all distant Works, because the Guards of the Trenches are continually carry'd on nearer; besides, it is useful some Days for the Soldiers, and serves afterwards to lodge the Sutlers, some of whom must be always in the Trenches, that the Soldiers may not leave their Work to go for Provisions to their Quarters. The second Day, a Body of Foot may be left in the Works of the first Night, and a small Body of Horse in the Place of Arms, till it is finished, which is generally the third Day.

The Trenches are not to be much advanced the third Night, if the Garrison be strong, but the Redoubt must be made tenable, the Place of Arms for the Horse and Foot raised, and a Line of a hundred or fifty Paces advanced. The Intrench-way must not go into the Place of Arms, but there must be Banquettes supported with Stakes, Fascines, and Sand-bags, for the Musketeers to fire over the Parapet; they must be quite open behind, that the Battalions may go out into the Plain, and the Horse beat out the Enemy, if they should come into them. There must be Places enough in Number and Largeness to contain all the Guard of Foot, which must be there at every Attack, or in the Redoubts, but never in the Trenches, unless when near the Place; at which Time the Musketeers should be lodged there to fire upon the Enemy,

Note, That *Redoubt*, or *Redoute*, is a small square Fort, without any Defence but in Front; used in Trenches, Lines of Circumvallation, Contravallation, and Approach; as also for the lodging of Corps de Garde, and to defend Passages. In marshy Grounds, *Redoubts* are often made of Stonework, for the Security of the Neighbourhood; their Face consists from ten to fifteen Fathom; the Ditch round them, from eight to nine Feet broad and deep; and their Parapets have the same Thickness.

If the Trench can be advanced the third Night, to the Ground where the General shall think fit to place the first Battery, it must be begun the said Night. Batteries cannot have much Effect, if they are above a hundred and fifty Feet from the Place in a plain Ground, and this is generally the Work of the fourth Night. The Battery is to be inclosed between a Redoubt and the Trenches; and the Intent of this Battery is to beat down the Parapets of the Enemy, and to dismount their Cannon that commands the Trenches. All the Cannon for Batteries are generally planted there, both to incommode the Enemy, and to master their Cannon; and tho' the Place be but poorly provided with Artillery, yet it will prevent this Battery doing any Service, unless it has many Cannon: The Batteries nearest the Place are least exposed, because seen from fewest Places; and the Cannon of the Garrison being generally planted high, either on Cavaliers, or on high Ramparts, they cannot do Execution near the Place.

The fifth Night a Redoubt must be made on the Wings of the Battery, and a Line carried forwards as far as may be; and if the Parapets of the Redoubts, and Places of Arms are to be raised, some Workmen must be sent thither.

Three Nights, and two Days, are generally spent in putting Batteries into good Condition; and the third Night the Guns are planted; but if Care be taken, then Batteries of two or three Cannons may be finished in two Nights and one Day.

The Trenches are to be carried on, and a Place of Arms made the sixth Night.

A Redoubt shall be made the seventh Night, and all behind is put into a good Posture.

The

The Trenches shall be carried on the eighth Night, and a great Place of Arms made within a hundred Paces of the Glacis.

Note, That the more the Approaches are advanced, the deeper they must be. At the Beginning they are made greater by Degrees; so that having at first but four Feet in Width, they are made, afterwards, from eight to nine Feet broad, that the Cannon may be transported that Way to the Batteries. That the Places of Arms must be, as much as possible, over-against one another, that they may flank one another, tho' Traverses must be put to those Places of Arms, to shelter those posted in them against the Bombs. That the Approaches must intersect one another; and every where, if practicable, there ought to be deep Places, cover'd with Trees, and Earth, against the Bombs; and that if a Ditch must be conducted directly towards the Place, it is proper it should be made towards the End of the Faces of the Ravelin, towards the Angles of the Epaule of the Bastion, and obliquely towards the Points of the Ravelin; but an Engineer must be very exact in tracing them.

Note, also, That these Rules are to be follow'd with regard to the Batteries: 1. Those made to beat the Place, ought not to be above 500 Paces distant from it. 2. The Beginning of the Breach can be made at 300 Paces. 3. To end the Breach, Batteries must be erected on the Glacis, carried off from the Counterscarp. 4. Against Works lined with Stone, the Batteries are erected perpendicularly, the Shots which strike perpendicularly being, in that Case, the best: But against Works of Earth, it is best to dispose them so, that it may be beaten with the heavy Cannon, perpendicularly, and on both Sides, also cross-ways. 5. The Parapets must be very high and thick, well interwove with Hosiery Twigs, and Faggots, and provided with good Embrasures; and, in Case of Necessity, there must be used Gabions and Wool-packs: There should be always a Space from 18 to 24 Feet between each Piece of Cannon, according to their Bigness; whence the Place of a Battery of 12 Cannons, of the second Rank, must have 24 Yards in length. 6. The Embrasures must be made from 2 to 3 Feet broad on the inside, and from 10 to 12 on the outside. 7. The Floor for the Cannons is composed of good Boards, and must be very even, that the Gunner may be more sure in pointing his Cannon. 8. A Ditch must be made behind the Batteries for the Powder, the Inside very well lin'd with Boards, cover'd a-top with Cows Skins, and defended with Gabions, cover'd with Earth against the Bombs. There are also made behind the Batteries several Cross-ditches, like the Approaches, where the Munition is distributed into several Places.

As there is no positive Rule for advancing the Trenches, what has been said may serve to give some Light into what may be done, as near as can be; and the Work may be advanced or retarded, according to the Strength or Weakness of the Place besieged; according to the Defence it makes by Sallies, or firing from the Ramparts, or the Out-works; and according to the easiness or Difficulty in digging the Trenches, or according to the Number of Men appointed for the Works, or according to their Work, as they are well directed and paid.

There must be more or less Redoubts and Places of Arms, as the Danger of Sallies may be greater or smaller: And for the better carrying on the Work in advancing the Trenches, till it be brought within two hundred Paces of the Place, a Serjeant shall be posted at Night with fifteen Men, at the Head of the Workmen, supported by a Lieutenant and thirty Men; on the Right of them a Battalion, and another on the Left, lying flat on the Ground.

When the Works are advanced near the Place, if

there be no Ridge of Ground, or a Hollow capable of covering Men, a Serjeant and fifteen Men only shall be posted at the Head of the Work, and Battalions, in the nearest Places of Arms, and behind the Redoubts, which are nearest the Place, to sustain the Workmen, in Case of a Sally; and great Care must be taken that they do not shew themselves upon false Alarms, which the Enemy will make, to fire with their Cannon and small Shot upon the Battalions, when exposed.

If the Lines drawn from the last Place of Arms, cannot come within four or five Paces of the Foot of the Glacis, one, or rather two Saps should be made toward the Angle, till you are within the said Distance, and from thence you must attempt to lodge yourself on the Covert-way, which is generally the most difficult and bloody Action of a Siege; and which is done in several Manners. For some are for marching bare-faced to dislodge the Enemy, when the Trench is within 12 or 15 Feet of the Glacis, and make a Lodgment on the Angle at the same Time. Others, to save their Men, are for proceeding to the Glacis, by way of Sap, and then making a *Fourneaux*, or small Mines, lodge themselves on their Ruins; some are for making the Lodgments by Day, and some by Night: The best Way to make them is by open Force, without making Saps, or *Fourneaux*, and to attempt them by Night; and tho' more Men are lost this Way than the other, yet much Time is saved, and the Danger is over in a few Hours; whereas if you proceed the other Way, more Men are lost in the Sallies which the Enemy make, by firing from the Place into the Trenches, and by the continual Fatigues the Soldiers endure in Sieges, than if you had made a Lodgment by open Force: But the *English*, *Germans*, and *Dutch*, are of a contrary Opinion, judging it more safe to make their Lodgments by Saps.

For the better making them, it will be proper that the Line drawn from the large Place of Arms made last, opposite to the Angle salient of the Covert-way, do run ten or twelve Fathom beyond the said Angle, and be very wide, to contain a Body of Foot, that may sustain the Lodgment.

In the Line *HI*, shall be all necessary Provisions, of Fascines, Clay, Baskets, Earth-sacks, Barrels, Mantelers, Wheel-barrows, Chandeliers, Pick-axes, Spades, and Shovels, and a sufficient Number of Workmen and fighting Men shall be added, who are to be disposed after this Manner: For Instance, suppose the Guard of the Trenches to consist of a thousand Foot, and with them five hundred Workmen, they shall leave the Place of Arms between *E* and *f*, the Redoubt *E*, the Battery *D*, and all that is behind to be guarded by those that are detached from all the Army, to sustain the Battalions that mount the Trenches that Day, which is always to be practised upon the like Occasion. A hundred Men shall be put into the Redoubt *G*, two Hundred into the Place of Arms *H*, four hundred Musketeers into the Line *HI*, to fire continually from thence; and a hundred and fifty into the Line *HI*; a strong Detachment shall be appointed to make the Lodgment: And thus ordered, an Engineer in Armour, and a Serjeant with fifteen proved Men, shall first march to the Angle-salient of the Covert-way, from whence they shall make a Discharge upon the Defendants within, and drive them off, if their Number be small: A Lieutenant with thirty Men shall sustain him; and a Captain, with a Lieutenant or Ensign, and fifty Men, shall sustain him: The rest, commanded by a Field Officer, shall be in two Bodies, one stronger than another, as the Enemy may be feared, either on the Right, or on the Left.

Each of these Bodies shall again be divided into two, commanded by Captains, that is, one third divided by the other two thirds; one of them in the Line *HI*, and the other in the Line *HI*, and shall draw up towards the open Country, leaving the Banquette to the Musketeers, who are lodg'd there, to fire.

If the Serjeant who falls on at the Angle of the Covert-way, perceives that the Enemy is very strong, then the two Bodies shall come out of the Trenches, and attack the Covert-way, on the Right and Left of the Angle-saliant, as near as they can to the Angle-reentrant; and as soon as they have fired shall run upon the Enemy with Sword in Hand, that so the Fire of the Place of the Covert-way, and of the Half-Moons, on the Right and Left, may do the less Harm.

Things of this Nature must not be undertaken, except they are carried on furiously; for if the Enemy do line their Parapets well, their Musketeers will wound Abundance of Men in a short Time: And, during this Attack, all possible Diligence must be used in working at the Lodgment, which is to be made after the following Manner.

When the Assailants, who are commanded to fall upon the Angle-saliant of the Covert-way, have beat off the Enemy, then the Lieutenant shall post himself on the Glacis, about fifteen or sixteen Paces from the Angle, on that Side where there is most Danger of Sallies. He is to cover himself with two or three Mantelets in Front, and one or two by way of Empalement, to be brought thither after him by the Workmen; the Serjeant shall do the same on the other Side of the Angle, and the Captain shall enter the Trench, that he may be under Covert, being always ready to sustain the Lodgment, if the Enemy should offer to dispute it at handy Strokes. As soon as the Soldiers are cover'd, who fall on at the Angle, the Engineer shall make the Lodgment, which generally begins by a Range of Wool-packs and Gabions, to be placed along the Covert-way, on the Top of the Glacis, within four or five Feet of the Edge of the Parapet, and the Lodgment to be four or five Fathom long on each Side the Angle, which he causes to be done at the same Time by two Conductors of the Works, who make the Workmen fill the Gabions with Earth as fast as possible, every Man bringing a Bag of Earth, which he throws into the Gabions. Thirty-two Men shall follow the Lieutenant, who commands the Forlorn, carrying eight Mantelets, three to cover the Serjeant, and five for the Lieutenant, over which some of them shall fire, and the rest keep themselves under Covert from the Shot of the Place. When the Workmen have placed the Mantelets, they shall fetch Bags of Earth to put into the Gabions, carried by thirty Workmen, follow'd by two Hundred more, each carrying a Bag of Earth, that the Gabions may be sooner fill'd. The rest of the Workmen shall take Chandeliers and Fascines, to make Empalements on the right and left of the Lodgment, from the Edge of the Glacis to the Foot of it; and when they have placed the Fascines they have brought, the first turn on the Chandeliers; they must continually go for more till they have filled them. They who have carried on the Mantelets and Gabions, shall take Tools and work behind the Gabions, to sink and enlarge the Lodgment; and they that brought the Sacks of Earth, should go for Fascines, and lay them on the Gabions, and also behind them, that the Lodgment may be soon in a Posture of Defence. When the Chandeliers are filled, they who brought Fascines shall take Pick-axes and Shovels, and work behind to cover them with Earth, and sink and enlarge the Lodgment. The rest of the Workmen shall be employ'd in making a Way or two from the Head of the Trench to the Lodgment; and they must endeavour to make a Banquette before the Day appears, and set the Parapet of the Lodgment with Sand-bags, or Baskets, to lodge Musketeers there.

The Lodgment made on the Angles of the Covert-way, before the Point of the Bastion, are generally battered with Cannon from the opposite Flanks; and therefore, if the Place has Store of Artillery, there shall be as much Place left between the Edge of the Covert-way, and the Gabions, as will make the Parapet Cannon-proof.

If there be a Half-moon fronting the Place you at-

tack, with a Covert-way before it, you must make a Lodgment there, before you do it on the Angle-saliant, before the Bastion; or rather at the same Time, if you have Men, and Neccessaries enough, to undertake both Lodgments.

If you carry on two or three Attacks against the Place, make a Lodgment from every one at the same Time, to divide the Enemy's Forces.

They who are for making this Sort of Lodgment in open Day, will have the Trenches carried to the Foot of the Glacis, and then all the Trenches that can must fire upon the Town, being lin'd with Musketeers, and Use be made of all the Cannon; then Men in Armour, that is Musket-proof, and Grenadiers, must be sent to drive away the Enemy out of the Angle-saliant, and at the same Time a Lodgment made with Gabions and Sand-bags, to extend about two Fathoms on each Side of the Angle. But this Thing being done in open Day, it is almost impossible to prevent those that work at the Lodgment from being kill'd or wounded, either by those in the Covert-way, or that man the Parapet of the Half-moon, or of the Place; and though the Lodgment should take Effect at the first, by surprizing the Enemy, yet if they have any Courage, they will come and demolish it, which may be done with a small Loss, being expos'd to those few Men only, who are contain'd in an imperfect Lodgment, and encumber'd with Workmen.

The greatest Advantage of attempting to make Lodgments in the Night is, that when the Enemy has strong Bodies in the Covert-way, Battalions are sent on the Right and Left to mix with them, which cannot be undertaken in the Day-time, by reason of the Fire of the Place; besides the Lodgments may be made larger by Night, and therefore the more tenable.

In order to make the Lodgments, by gaining Ground without open Force, the Trenches must be carried on to the nearest Place that may be, without exposing them to enfilade; then three or four Saps must be carried on by Steps, descending directly towards the Angle-saliant of the Covert-way: They are made by driving a Mantelet, set on two Wheels before them, or else rousing along a *Saucisse*, and placing Fascines or Gabions on the Right, or Left, as they draw near the Place, and Blinds at certain Distances, to prevent the Enemy from looking into the Trenches: This Work must be continued Day and Night, and the Men being relieved from Time to Time, that being always fresh they may do the more Work. When the Sap has been carried on eight or ten Fathom, Lines must be drawn on the right and left, Parallel to the Place, and four or five Fathom long, which are made small Places of Arms to contain some Soldiers, both to sustain the Head of the Work, and make the necessary Provisions for advancing it. When you come within a Stone's Throw of the Covert-way, the Sap must be cover'd with Clay, and some Earth thrown at the Top of them, to defend them against Stones, and Hand-granadoes: And when you come to the Foot of the Glacis, you must begin the *Fourneaux*, which are still to be carried on descending, to avoid the Counter-Mines; and that having more Earth upon them, they may take the more Effect; and they must be carried far enough to blow up the Parapet of the Angle.

When the *Fourneaux* are carrying on from middle Lines, the other Saps must be carried on as far as may be on the Glacis; and Mines must also be carried on to disappoint the Enemy, if you apprehend that he will make other *Fourneaux*.

As soon as the *Fourneaux* are ready, they must be sprung by Night or Day, and armed Workmen shall be sent at the same Time, sustained by good Soldiers, to place some Gabions on the Part demolish'd by the *Fourneaux*, and to fill them with Earth, which may be easily done, because the blowing up will loosen it all.

To favour this Sort of Lodgment, it would not be

amiss to make another half Way up the Glacis, raising its Parapet as high as that of the Covert-way, so that the latter being overthrown by the *Fourneaux*, the other might see into the Covert-way; and having thus made one on each Side of the Angle, you would be Master of the Covert-way without Loss of Men.

The Inconveniency of making Lodgments on the Counterscarp after this Manner is, that Saps being made by few Men, the Enemy may send as many to oppose you, either above or under Ground, which is safest for them, and so disappoint your *Fourneaux*, or blow up the Head of your Saps.

As soon as the Lodgment is finished, there must be Saps carried on, both to go down into the Covert-way, and to continue the Lodgments on the Top of the Glacis. The Descent into the Covert-way must be very deep, that it may not be seen by the opposite Flank, and not be open'd till Night-fall, at which Time a Traverse is to be made on each Side, and the Head of the Lodgment on the Edge of the Ditch. While one Part of the Workmen is employ'd about the Lodgment, the rest are to carry on the Trenches along the Edge of the Glacis, which must be done by Sap, if the Enemy make a good Defence; but if they make a bad one, this Lodgment must be done like that of the Angle, that is, with Gabions filled with Earth; and the Empalements with Chandeliers full of Faggots.

Note, That a *Chandelier* is a wooden Frame, whereon are laid Fascines or Faggots, to cover the Workmen instead of a Parapet. *Chandeliers* are sometimes also made to prevent the Enemy from seeing what passes within. The Difference between *Chandeliers* and Blinds consists in this, that the former serve to cover the Pioneers before, and the latter also cover them over Head.

If you would attack the left Face of the Bastion, the Lodgment R shall be made a Battery to dismount the Guns on the opposite Flank, and ruin it as much as may be. While the Battery R is firing, the Lodgment V is to be made to cover it, from whence the Traverse X, shall be drawn and made Cannon-Proof. The Battery shall be enclosed behind, by the Line Y, and if the Enemy be strong and daring, the Redoubt Z shall be made to secure the Batteries against Sallies, and all the Head of the Trenches. When the Battery R is finished, and secured by Works, the Line S shall be pushed on towards the Gorge of the Half Moon, and Descents and Traverses shall be made into the Covert-way at 3 and 4, as also the Line 2. If you are incommoded by the Enemies Traverses in the Covert-way, they must be attacked in the Rear by Night, and when they are dislodged, you may lodge yourself there, if the Head of the Work be not far off, or else you must raze them.

The Lodgments on the Covert-way of the Half-Moon, which are of the same Nature as those that are made on the Angle that covers the Point of the Bastion, are to be perfected, first if you can only make one at once, or both together, provided that you have Men enough to carry on both. There must be Trenches along the Edge of the Glacis, and in the Covert-way, to meet at the Gorge with those made before the Face of the Bastion.

If the *Half-Moon* can be batter'd with Cannon, the Parapet beaten down, the Descent into the Ditch easy, and little or no Water in it, then you may march boldly, and lodge yourself on it, being provided with all Things necessary to make a good Lodgment, and a Way to go to and come from it, under Covert. If the Ditch of the Place is full of Water, and the Enemy can have no Communication with it but by Boats, there will be no very great Danger in attempting this Sort of Lodgment; but if the Ditch be dry, or if the Enemy have one Side of the Covert-way free to succour the Half-Moon, and the Garrison is strong, it must be attempted with more Precaution.

When the Lodgments are made on the Top of the

Glacis, and the Bottom of the Covert-way, if the Ditch be dry, you must make two or three Descents into it, which may be cover'd with *Madriers* that are Proof; then make a Gallery or Sap at the Bottom, throwing Earth on them, and having sprung a Mine, give the Assault towards Night, to lodge yourself there, as shall be thought convenient.

Note, That a *Madrier* is a thick Plank, sometimes armed with Iron Plates, having a Cavity sufficient to receive the Mouth of a Petard when charged; with which it is applied against a Gate, or other Body designed to be broke down. *Madrier* denotes also a long and broad Plank used for supporting the Earth in Mining, carrying on Saps, making Caponiers, Galleries, and the like. But *Madriers*, in this Place, are Planks lined with Tin, and covered with Earth, serving as Defences against artificial Fires, in Lodgments, &c. where there is Need of being cover'd over Head.

The better to understand what Sort of Lodgments are to be made, you must first consider whether the Half Moon is retrenched or not; after what Manner, whether the Ditch of the Place be dry or full of Water; whether the Enemy can succour the Half Moon, or have no Way left to come at it. If the Half Moon is retrenched, you must know what Sort of Retrenchment it is. Though the surest Way is to make two Mines at all Half Moons, that shall be thought retrenched; the one as near the Gorge as possible to blow up the Traverses or Retrenchments, and the other towards the Angle, to hinder the Enemy from making the Retrenchment a Reverse; and also because the Lodgment made on the Angle, cannot be seen from the Place, as those can which you make on the Face, most of which are exposed to View. When you have mounted on the Ruins of the Mine, if you can perceive that the Retrenchments are not well finished or tenable, you must endeavour to carry them at the same Time; and if the Ditch of the Place be full of Water, and the Enemy have no Communication left to come at it, then you may make a Lodgment as large, or as small as you please, or in what Part you please, provided you carry on a Trench to go to it under Covert.

If you attack the right Flank, and the Enemy is Master of the Covert-way which leads to the Left, then your Lodgment must be made on the Top of the Parapet, at the End of the Face next the Gorge, to sweep the Covert-way through which the Enemy might return; and if you can, you must, at the same Time, make a Lodgment at the Foot of the Rampart on the Edge of the Water. If there be a Bridge of Communication between the Place and the Half Moon, a Lodgment must be made at the Head of it. If you think you cannot sufficiently secure the Lodgments, either at the Head of the Bridge, or at the Communication of the Covert-way of the Half-Moon; then the first Night let a Lodgment be made only on the Effect of the Mine, and if the Ditch of the Half Moon be full of Water, you must endeavour to make the Passage easy.

To pass the Ditches of Half Moons, when they are full of Water, after you have made the Descents on the Edge of the Water, Fascines, loaded with Stones, must be thrown into the Ditch, till they are above Water, and then Earth or Stones cast over both to settle them; and to prevent their being burnt, and an Empalement made with Earth and Fascines next the Place. The Work is favoured by the Cannon, which must have beaten down all the Parapet of the Half Moon, and carried off the Baskets generally set there to cover the Musqueteers, and by the small Shot posted along the Covert-way, both above and below; and if the Enemy lodge any Cannon on the Face of the Bastion, to prevent you from passing the Ditch, you must raise Counter-Batteries on the Angle of the Covert-way to dismount their Guns. If the Cannon and small Shot cannot hinder the Enemy that are lodg'd in the Half-Moons, from firing on those that work at making

making the Passage of the Ditch, then, besides the Empalement made against the Place, you must set on the other Side a Row of Chandeliers full of Fascines, or a Range of very high Gabions, or two, one upon another, to hold up Clay covered with Earth, if the Half Moon is high; and if low, then Blinds will be sufficient, that the Enemy may not fire on the Gallery, unless at the Head, where it is impossible to work without Danger.

Half Moons that are low, occasion more Trouble in passing the Ditch, than those that are high, or if they have a *Fausse-braye*, for it is almost impossible to pass the Ditch without being cover'd forwards, which is done by putting on *Mantelets* before the Men, when the Ditches are dry, or laying a great Heap of Fascines at the Head of the Gallery, if they are wet. And whereas it is difficult to cast Fascines into the Water over the said Heap, two Men, each of them with a very long Fork or Prong, are to take up a Fascine at both Ends, well loaded, and so throw it over the Heap into the Water. If the Ditches are dry, and the Retrenchments of the Half Moon be carried at first, you must lodge yourself on them, if you can, or raze them, lest the Enemy return to the Half Moon, and make use of them. If the Ditch of the Place be dry, and you can easily mount into the Half Moon by the Gorge, after forcing their Retrenchments you must make a Lodgment on it, and its Communication by the first Ease, that you may be succour'd by it, in Case of an Attack: From thence you must by Degrees push on Lodgments to the Gorge of the Half Moon, which you must quite inclose with a Parapet, to prevent the Enemy from returning. If the Gorge of the Half Moon be lin'd with Stone next to the Place, and the Ground very high and steep, then as soon as the Retrenchment is forced, you may make a Lodgment on the Edge of it, because the least Work will deter them from coming to lodge themselves there again. If they have any Traverses in the Ditch of the Half Moon, or of the Retrenchments, then, as you pass the Ditch, you must empale yourself on that Side; and to secure the Miners and the Work in the Ditch from Sallies, you must make an opposite Traverse in the Ditch.

As soon as you are Master of the Half Moon, you must contrive to pass the Ditch of the Place, in order to fix the Miner to the Face of the Bastion; but before you attempt to pass, Lodgments must be made all along the Covert-way, as done before to the Half Moon, both on the Top of the Glacis, and the Edge of the Ditch.

If the Ditch is dry, and its Talus, properly called the Counterscarp, is very steep, or faced with a Wall, you must begin the Descent from the Foot of the Glacis of the Covert-way, or farther off if the Ditch be very deep; if it were but eight or ten Foot deep, you might begin the Descent within the Covert-way. If the Enemy be strong and bold, several Descents must be made, that the Lodgments may be succour'd with more Ease, and the Men in the Ditch. Among the several Descents, that in the Midst is to serve to fix the Miner to the Bastion, and the rest to make Lodgments in the Ditch, which may be made with Chandeliers full of Fascines, if it is so wide that the Enemy cannot throw Fire-works into it; but if they can, then they must be made of Gabions set one upon another, and covered with raw Hides, and Part of the Lodgments covered with *Madriers*, or Clays loaded with Earth. Musket-Shot cannot well reach but from the Flank, against which you must empale yourself; and the Thickness and Height of the Bastion will hinder the Enemy from looking into the Lodgment.

If the Counterscarp has so great a Talus or Slope, that there is no Difficulty in going up and down, Cuts must be made from the Top to the Bottom, of the the Depth of a Man, covered with *Madriers* and Clays covered with Earth.

When the Ditch of the Place is full of Water, and the Enemy not able to make any Sallies on the Works carried on, one Descent will be sufficient, in order to

lay over the Bridge or Gallery that Way, to fix the Miner to the Bastion: But the Gallery or Bridge being generally destroyed by the Effect of the Mine, a second Descent should be made nearer to the Angle, and laid over a Bridge even with the Surface of the Water, loaden with Earth and Stones, that it may bear against the Ruins the Mine may cast upon it; and this must not be made until that which leads to the Mine be finished, that so the Gallery or Empalement made upon it, may cover those that work at the second Bridge from the Musqueteers of the Flank.

As soon as the Lodgments are made at the Bottom of a dry Ditch, the Miners are fixed to the Bastion, and covered from above with *Madriers*, which they rest against the Wall, and which are cas'd with Tin, that the Fire-works may not take hold of them, and the Cannon or Small Shot of the Flank, may not incommode them. The Face of the Bastion is to be battered more towards the Flank, at the Place designed to fix the Miner, that the Ruins of it, which fall into the Ditch, may serve the Miner instead of an Empalement against the Flank. It is requisite to make the same Ruin when the Ditch is full of Water, and Miners may swim over to lodge themselves on it. Sometimes they may dig pretty far into the Wall before the Enemy can discover it; and having carried a Rope with them, may draw over their Tools on a Ponton, and *Madriers* to cover them from above, in case the Enemies should discover their Work. That the Miners may pierce the Wall with more Ease, some Cannon should be planted on the Counterscarp, if possible, to the End, that the Wall being already shaken, they may find less Difficulty in boring it.

If the Enemy defend the Passage of the Ditch, by playing their Cannon on the Flank, notwithstanding your Batteries on the Counterscarp, or by burning the Blinds and Empalements made on the Bridge; or by cutting off the Miners if the Ditch be dry; in this Case a Gallery must be made.

The Passage of the Ditch being secured, all possible Care must be taken to advance the Mines; and to oblige the Miners to work more vigorously, you must encourage them with Money. It is also expedient to enhance their Price according to the Expedition they make in finishing the Mine: As for Example, if they are to have fifteen Pounds for making a good one in three or four Days, promise them double if they perform it in two.

Opinions vary as to the Part of the Face of the Bastion, to which the Miner is to be fixed: Some will have him towards the Angle, because the Semicircle made in the Bastion, by the Effect of the Mine, is not seen from the Bastions of the Place: Others will have the Mine made nearer the Flank than the flanked Angle, to blow up the Retrenchment, if there be any.

If the opposite Faces B and A, are attacked, the Miners will be better in the midst of the Place, or rather nearer the Flank, to ruin entirely the Face of the Bastion, and the first Retrenchment, and to draw the nearer to the Gorge of the Bastion, where is generally a second Retrenchment. But if only one Face of the Bastion be attacked on one Front of the Place, the Mine will be better at the Angle, to prevent the Effect of the Mine's being laid in the View of the opposite Bastion: Most Men desiring that the Effect of the Mine may be great, making a large Breach in the Wall, and overthrowing Abundance of Earth, that there may be an easy Ascent to the Bastion, and many Men mount a-breast to make a Lodgment: But as the Lodgments designed on the Top of the Bastion seldom succeed, and when they do, they are attended with a great Loss of Men; it is better to make an indifferent Breach only to overthrow the Wall, to prevent Countermines; and then begin another Mine on the Ruins, to be carried on into the Body of the Bastion, to take the intended Effect.

Many Inconveniencies attend large Breaches, if you fail to lodge yourself upon them: One is the easy Descent it gives to the Belieged to come down upon the Lodgments you are making, or have made; either at

at the Bottom, or half way up the Breach, in order to fix the Miner. Another is, that the Enemy having raised a Parapet on the Edge of the Mine, the larger it is the more it overlooks all the Ruins of the said Mine. Besides, it must be considered, that to the End the Mine may have a great Effect, it must be carried far into the Earth, which often gives you an Opportunity of disappointing the Enemy's Countermine: I would therefore make the Mine in the Wall, and after the Effect, make a Lodgment at one third of the Height after this Manner. Ten or twelve sturdy Soldiers with Shovels, shall go as privately as possible, to level the Place where the Lodgment is to be made, so that three or four Gabions may stand on it, in a Range; then four Ranks of Gabions, at about seven or eight Feet distance from one another, shall be pushed on covered with Wool-packs; and then two or three Soldiers shall throw Earth on them, to secure the Lodgment against every Thing that may be thrown from above. Thus four Ranks of Gabions covered, as heretofore described, will make three little Lodgments; the middlemost shall serve for the Miners, who shall presently fall to work to make a Mine in the Earth of the Bastion; and the Lodgments on the Right and Left, shall each of them contain four or five Soldiers well armed, with Head-Pieces and Breast-Plates, Musket-Proof, and with Javelins and Pistols.

For the greater Security, two Lines may be made at the same Time, one at the Angle, and the other towards the Orillon, that the second Line may ruin the Retrenchments made within, as those in the Bastion A B C, which might be ruined by the Effect of the Mine, were it not for Fear they should be disappointed, and the Enemy be in a Condition to ruin the Lodgment on the Top of the Breach.

If the Retrenchment be made as in the Bastion C, and its Ditch deep, it will be hard to be Master of it, unless you lodge yourselves on the Top of the Bastion, after the first or second Mine have taken Effect. There if you think you cannot easily begin a Mine at the Breach of the Rampart, you may carry it under the Ditch of the Retrenchment, spring it, and by that Means plant Cannon at the Top of the Bastion, and batter the Retrenchment; or else make a Lodgment at the Edge of its Ditch; then passing it, fix the Miner to the Retrenchment. While the first Mines are carrying on, it will be proper to begin other Mines in such Places where the Effect of the first may not ruin them, so that the one may be used if the other be disappointed; or else by that Means to carry on Mines into the Body of the Bastion, and under the Retrenchments, if it should prove more practicable that Way, than by the Breach the first Mines have made.

If the Miner can be fixed to the Courtin, it will be of great Use, that being a Place behind which there are seldom any Retrenchments; but the Besieged must make a very weak Defence if they permit the Miner to be fixed there.

If there be a Gallery in the Thickness of the Wall, either of the Body of the Place, or of the detached Works, three *Fourneaux* shall be made at the same Time, upon one and the same Face, which shall only blow up the Thickness of the Wall as far as the Gallery; and being laid open in three Places, the Middle may serve to fix the Miner again to make a large Mine, and the Holes on the Right and Left will prevent the Enemy from passing the Gallery, to obstruct the Work of the Mine. But when the Out-works are taken, and a Breach made in the Bastions, the Town generally surrenders.

Note, That a *Breach* is a Hole, Gap, or Aperture, made in any Part of the Works of a Town, either by laying Cannon or springing Mines, in order to storm the Place, or take it by Assault. They say, make good the *Breach*, fortify the *Breach*, make a Lodgment on the *Breach*, &c. To clear the *Breach*, is to remove the Ruins, that it may be

the better defended. A practicable *Breach* is that where the Men may mount and make a Lodgment. A *Breach* ought to be 15 or 20 Fathom wide. The Assaultants make their Way to it, by covering themselves with Gabions, Earth-Bags, &c.

Note also, That the Besiegers encompass their Camp, to defend it against any Army that may attempt to relieve the Place with Lines of *Circumvallation*, *Countervallation*, and *Communication*. A Line of Circumvallation, is a Line or Trench, with a Parapet, which must be Cannon-Shot distant from the Place, ordinarily about twelve Feet broad, and seven deep; it is border'd with a Breast-work, and flanked with Redoubts, or little Forts, erected from Space to Space: It serves both to prevent any Succour from being sent into the Place, to keep in Deserters, and prevent Incursions of the Enemy's Garrison. Care must be taken that the Line of *Circumvallation* never pass by the Foot of an Eminence; lest the Enemy, seizing on the Eminence, lodge there his Cannon, and command the Line. *Countervallation*, is a Counter-line, or Ditch, made around a Place besieged, to prevent the Sallies and Excursions of the Garrison when it is strong. Along its Edge, on the Side of the Place, runs a Parapet; and it is flanked from Space to Space. It is without Musket-Shot of the Town, and sometimes goes quite round it, sometimes not, according as the General finds Occasion. The Army forming a Siege, lies between the Lines of *Circumvallation*, and *Countervallation*. The Lines of *Communication* are Trenches six or seven Feet deep, and twelve broad, made between one Fort, or Work, and another; in order for a safe Passage between one Quarter and another.

While a Place is besieged, the Besieged do not remain idle Spectators, but work, likewise, on their Side, in their own Defence, and to oppose the Besiegers. The Works they do, on that Occasion, are *Counter-approaches*, *Retrenchments*, *Caponieres*, *Countermine*s, *Fougades*, &c.

COUNTER-APPROACHES, are Lines or Trenches made by the Besieged, when they come out to attack the Lines of the Besiegers in form. A Line of *Counter-approach*, is a Trench which the Besieged make, from their Covert-way, to the Right and Left of the Attacks, in order to scour or enfilade the Enemy's Works. It should commence in the Angle of the Place of Arms of the Half-Moon that is not attacked; above 50 or 60 Fathom from the Attacks; and continued as far as shall be found necessary, in order to see the Enemy in his Trenches and Parallels. This Line must be perfectly enfiladed from the Covert-way, and the Half-Moon, that if the Enemy get Possession of it, it may be of no Service to him. In this Line the Governor must frequently, in the Night-time, send small Parties of Horse and Foot, to drive the Workmen from their Posts; and if possible carry off the Engineers, who have the Direction of the Work.

THE CAPONIERE, or *Caponniere*, is a cover'd Lodgment, sunk four or five Feet into the Ground, encompassed with a little Parapet two Feet high, serving to support several Planks cover'd with Earth. The *Caponiere* is large enough to contain fifteen or twenty Soldiers; and is usually placed in the Glacis, on the Extremity of the Counterscarp, and in dry Moats; having little Embrasures for the Soldiers to fire through.

COUNTER-MINE, is a subterraneous Vault, running the whole Length of a Wall, three Feet broad, and six deep, with several Holes and Apertures therein, contrived to prevent the Effect of Mines, in Case the Enemy should make any to blow up the Wall; but this Sort of Counter-mine is now little in Use. The modern Counter-mine is a Well, or Pit, and a Gallery, sunk on Purpose till it meets the Enemy's Mine, and prevent its Effect; it being first pretty well known whereabouts it is.

FOUGADE,

FOUGADE, or *Fougasse*, is a little Mine in manner of a Well, scarce exceeding ten Feet in width, and twelve in depth; dug under some Work, or Post, that is like to be lost; and charged with Barrels, or Sacks of Gunpowder, cover'd with Earth: It is set on Fire, like other Mines, with a *Saucisse*.

Note, That *Saucisse* is a long Train of Powder few'd up in a Roll of pitch'd Cloth, about two Inches in Diameter; serving to set Fire to Mines, or Caiffons. The Length of the *Saucisse* is to extend from the Chamber of the Mine, to the Place where the Engineer stands to spring the Mine. There are usually two *Saucisses* to every Mine, that if one should fail, the other may take Effect.

Note, That there are also *Saucissons*, which are a Kind of Faggots, made of thick Branches of Trees, or of the Trunks of Shrubs bound together; whose Use is to cover the Men, and to serve as Epaulments. The *Saucisson* differs from a Fascine, which is only made of the small Branches, and by its being bound at both Ends and in the Middle. Antiently they made the *Saucisson* 46 Feet long, and 12 thick; bound strongly together with three Bands, strengthen'd with Iron.

Note, again, That having often mention'd *Casemate*, in the Course of this Treatise, I must inform my Pupil, before I conclude it, that *Casemate* is a Kind of Vault, or Arch of Stone-work, in that Part of the Flank of a Bastion next the Courtin; somewhat retired or drawn back towards the Capital of the Bastion; serving as a Battery, to defend the Face of the opposite Bastion, and the Ditch. The *Casemate*, sometimes, consists of three Platforms, one above another, the highest being on the Rampart; but they commonly content themselves to withdraw the last within the Bastion. The *Casemate* is also call'd the *low Place*, and *low Flank*, as being at the Bottom of the Wall next the Ditch; sometimes *retired Flank*, as being that Part of the Flank nearest the Courtin, and the Centre of the Bastion; it was formerly cover'd with an Epaulment, or a massive Body, either round or square, which prevented those without from seeing into the Batteries; whence it was also called *cover'd Flank*. It is now rarely used, by reason the Enemy's Bat-

teries are apt to bury the Artillery of the *Casemate* in the Ruins of the Vault. Besides that, the terrible Smoke made by the Discharge of the Cannon, render it intolerable to the Men. Hence, instead of the antient cover'd *Casemates*, later Engineers have contrived open ones, only guarded by a Parapet, &c. *Casemate* is also used for a Well, with several subterraneous Branches, dug in the Passage of the Bastion, till the Miner is heard at Work, and Air given to the Mine.

Some Authors go back to the Beginning of the World for the Author, or Origin, of *military Architecture*, or *Fortification*. According to them, God himself was the first Engineer; and Paradise, or the Garden of *Eden*, the first Fortress. *Cain* improved on the Hint, in building the first City, *Genes.* iv. 17. after him came *Nimrod*, *Gen.* x. 10. then *Semiramis*, as *Polyænus* relates, *Stratagem*, lib. 8. c. 27. the *Canaanites*, *Numb.* xiii. 19. *Deut.* i. 28. *David*, 2 *Kings* v. 9. *Solomon*, 2 *Chron.* iii. 5. *Rehobcam* his Son, 2 *Chron.* viii. 5. and other Kings of *Judah* and *Israel*; and at length the *Greeks* and *Romans*. *Vitruv.* lib. 10. c. ult. and lib. 1. c. 5.

Such is the Series of those who fortified Places; to which might be added *Pharaoh*, the Persecutor of the *Israelites*, who built the Cities of *Pithom*, and *Raamses*, *Exod.* i. 11.

But how antient soever the surrounding of Cities with Walls, Towers, &c. may be, the Name *Fortification*, and the Art now understood thereby, are of no very old standing. They had their Rise since the Invention of Cannons; the terrible Effects whereof render'd it necessary to change the Structure of the antient Walls, and add so many Things thereto, that those Changes were thought enough to constitute a new Art, which was call'd *Fortification*, by the Strength it afforded those in Cities, to defend themselves against an Enemy.

The first Authors, who have wrote on *Fortification*, consider'd as a particular form'd Art, are *Ramelli* and *Cutaneo*, *Italians*; after them *Errard*, Engineer to *Henry the Great*, King of *France*; *Stevinus*, Engineer to the Prince of *Orange*; *Marolois*, the *Chevalier de Ville*, *Lorini*, *Coeborn*, the Count de *Pagan*, and the Marshal de *Vauban*: Which last two noble Authors contributed greatly to the Perfection of the Art.

FOUNDERY.

FOUNDERY, or **FOUNDRY**, (from the *French fondre*, to melt, or fuse) is the Art of Melting and Casting all Sorts of Metals; particularly Brass, Iron, Bell-Metal, &c.

The Artists, in this Art, are call'd *Founders*; and from their different Productions, are differently denominated; as *Founders of Small Works*, *Bell-Founders*, *Gun-Founders*, *Letter-Founders*, *Figure-Casters*, &c. so that the Art of *Foundry* must be consider'd as divided into so many different Branches; each whereof will fall under our Consideration; after we have provided ourselves with all the Utensils and Tools belonging to the Art of *Foundry*, as a *Furnace*, *Moulds*, a *Press*, &c.

The *Furnaces* of *Founders*, are various according to the different Kinds of Works to be cast.

That used by the *Founders* of small Works, is much like the Smith's Forge, with this only Difference, that the Fire is made on a Massive, built in a Cavity, in the Middle of the *Furnace*, to which the Pipe of the Bellows reaches. This Cavity goes to the Bottom of the Massive; across the Middle of it is placed a Grate, which holds the Fire and the Crucible: And below is the Place for the Ashes.

The *Statuaries* or Figure-makers use two Kinds of *Furnaces*. One has its Aperture outwards, over

which is placed a Grate, to dry the Moulds. The other is made in manner of an Oven, with three Apertures; one to put in the Wood, another for a Vent, and a third to run the Metal out at.

The *Letter-Founders* Furnace, wherein the *Bason* is placed for the Metal to be melted in, is made of the same Matter as Crucibles, and is usually eighteen or twenty Inches high, and ten or twelve in Diameter. An Iron Grate horizontally placed, divides it into two: The lower Part serves to hold the Ashes, and is furnished with a Hole to let in the Air. The Wood is put in the upper Part, through an Aperture made over the Grate. An Earthen Pipe serves to carry off the Smoke out at a Window, near which the *Furnace* is ordinarily placed. Lastly, a Stone or Wooden Stool, serves to support the *Furnace*, and raise it to a proper Height for the Workmen to work standing.

The Moulds are also different, according to the different Kinds of Works to be cast.

The Moulds of *Founders* of Small Works, like those of Moneyers, are Frames full of yellowish, pretty soft, and greasy Sand; which, after it has been used, becomes quite black, by reason of the Charcoal-dust used in them. These Moulds are made by working and tewing this Sand several Times over on a Board about a Foot square, placed over a kind of Trunk or Box,

Box, into which it may fall from off the Board. This tewing is performed with a Roller or Cylinder, about two Feet long, and two Inches in Diameter; and a kind of Knife made of the Blade of a Sword: With these two Instruments they alternately roll and cut the Sand, and at length turn it down into the Box underneath. Then taking a wooden Board or Table, of a Length and Breadth proportionable to the Quantity of Things to be cast; round this they put a Frame or Ledge, and thus make a sort of Mould. This Mould they fill with the Sand before prepared, and a little moistened. Which done, they take wooden or metal-line Models, or Patterns of the Things intended to be cast, apply them on the Mould, and press them down into the Sand, so as to leave their Form indented. Along the Middle of the Mould is laid half a little Cylinder of Brass, which is to be the Master Jet, or Canal for running the Metal; being so disposed as to touch the Ledge at one Side, and only to reach to the last Pattern on the other. From this are placed several lesser Jets or Branches, reaching to each Pattern, whereby the Metal is conveyed through the whole Frame.

This first Frame thus finished, they turn it upside down to take out the Patterns from the Sand; in order to which, they first loosen them a little all round with a small cutting Instrument. After the same Manner they proceed to work the Counter-part, or other Half of the *Mould*, with the same Patterns, in a Frame exactly like the former; excepting that it has Pins, which entering Holes corresponding thereto in the other, make, when the two are joined together, the two Cavities of the Pattern fall exactly on each other.

The Frame thus moulded is carried to the *Founder*, or Melter, who, after enlarging the principal Jet, or Canal of the Counter-part, with a kind of Knife, and adding the cross Jets, or Canals to the several Patterns in both, and sprinkling them with Mill-dust, sets them to dry in an Oven. When both Parts of the *Mould* are sufficiently dried, they join them together by means of the Pins; and to prevent their starting, or slipping aside by the Force of the Metal, which is to come in flaming-hot through a Hole contrived at the Master Jet, they lock them in a kind of Press, either with Screws, or, if the *Mould* be too big, with Wedges.

There are two Sorts of *Moulds* used in casting Statues or Figures, viz. the inner *Mould*, or Core; and the outward *Mould* or *Shell*.

The inner *Mould* or *Core* (thus called from *Cœur*, as being in the Heart or Middle of the Statue) is a rude lumpish Figure, a little resembling the Statue intended. It is raised on an Iron Grate, strong enough to sustain it, and is strengthened within-side by several Bars or Ribs of Iron. It may be made indifferently of two Sorts of Matters, at the Discretion of the Workman, viz. Potters Clay mixed up with Horse-dung and Hair, or of Plaster of Paris, mixed with fine Brick-dust.

The outward *Mould* or *Shell*, is a Kind of Coat or Crust laid over the Wax, (which Wax is a Representation of the intended Statue) and which being of a soft Matter, and even at first liquid, easily takes and preserves the Impression of every Part thereof, which it afterwards communicates to the Metal, upon its taking the Place of the Wax between the Shell and the *Mould*. The Matter of this outer *Mould* or *Shell*, is varied according as different Layers, or Strata are applied. The first is a Composition of Clay and old Crucibles, well grounded and sifted, and mixed up with Water, to the Consistence of a Colour fit for painting. Accordingly they apply it with a Pencil, laying it seven or eight Times over; letting it dry betwixt whites. For the second Impression, they add Horses Dung and Earth; lastly, the Shell is finished by laying on several more Impressions of this last Matter, made very thick with the Hand.

The Shell thus finished, is secured and strengthened by several Bands, or Girts of Iron wound around

it, at half a Foot's Distance from one another, and fastened at Bottom to the Grate under the Statue, and a-top to a Circle of Iron, where they all terminate.

Note, That if the Statue be so big, that it would not be easy to move the Moulds when thus provided, it must be wrought on the Spot where it is to be cast. This is performed two Ways: In the first a square Hole is dug under Ground, much bigger than the *Mould* to be made therein; and its Inside lin'd with Walls of Free-stone or Brick. At the Bottom is made a Hole of the same Materials, with the first Furnace heretofore mentioned; in which a Fire is to be lighted to dry the *Mould*, and afterwards melt the Wax. Over this Furnace is placed the Grate; and on this the *Mould*, &c. formed as above directed. In the other Way, it is sufficient to work the *Mould* above Ground; but with the same Precaution of a Furnace and Grate underneath. When finished, four Walls are to be run up around it; and by the Side thereof a Massive, made for a melting Furnace: For the rest, the Method is the same in both.

The *Mould* being finished, and inclosed between four Walls, whether under Ground or above it, a moderate Fire is lighted in the Furnace under it; and the Hole cover'd with Planks, that the Wax may melt gently down, and run out at Pipes, contrived for the Purpose, at the Foot of the Mould; which are afterwards very exactly closed with Earth, as soon as all the Wax is carried off. This done, the Hole is fill'd up with Bricks thrown in at Random, and the Fire in the Furnace augmented, till such a Time as both the Bricks and the *Mould* become red-hot; which ordinarily happens in twenty-four Hours: Then the Fire being extinguished, and every Thing cold again, they take out the Bricks, and fill up their Place with Earth, moisten'd and a little beaten, to the Top of the *Mould*, in order to make it more firm and steady.

The *Moulds* of *Letter-Founders* are partly of Steel, and partly Wood; the principal Parts whereof are, 1. Two Steel-Plates, with each its Screw, to keep them fast at a Distance from the Boards. 2. Two call'd *long Pieces*. 3. A Piece call'd the *Blank*, which is what properly forms the Body of the Character, at the Extremity whereof the Matrice is put. 4. A Jet or Cast; which is a Sort of little Funnel, to receive and convey the melted Matter to the Matrice. 5. A Register, serving to rejoin the two Parts of the *Mould*, after they have been opened to take out the Letters when cast. On the Outside of the *Mould* are three other Pieces, viz. the Bow at Bottom, and two Hooks a-top. The Bow is a thick Steel-Wire, two or three Lines in Diameter, and eight or ten Inches long, bent in manner of a Bow or Arch; whereof the lower Piece of Wood is, as it were, the Cord or String. One End is fastened to the Board, and the other, which is left at Liberty, serves by its Spring or Elasticity, to press and retain the Matrice of the Character against the Extremity of the *Blank*, where the melted Matter running in makes the Impression. The Hooks a-top of the *Mould* are also of Wire, about the same Size with the Bow, and about an Inch and a half long; being fastened, one of them to one Board, and the other to the other. Their Use is, to open the *Mould*, and to take out the Character when cast, so as the Workmen may not be incommoded with the Heat.

From this Description of all Sorts of *Moulds* for *Founders*, of what Denomination soever, we'll pass to that of their *Press*, which is a strong square Frame, consisting of four Pieces of Wood, firmly joined together with Tenons, &c. This *Press* is of various Sizes, according to the Sizes of the *Moulds*; two of them are required to each *Mould*, at the two Extremes whereof they are placed; so as that by driving wooden Wedges between the *Moulds* and the Sides of the *Presses*, the two Parts of the Mould wherein the Metal

Metal is to be run, may be pressed close together.

Being thus provided with all these principal Utensils, and likewise with Crucibles, Ladles, &c. we'll go to work, beginning by the most easy Branch of *Foundery*, which is that of small Works; and this by ranging our Moulds near the Furnace, to be in Readiness to receive the Metal as it comes out of the Crucible, which must be an earthen One, about ten Inches high, and four in Diameter. When the Fuel in the Furnace, which is to be of dry Wood, is pretty well lighted, this Crucible full of Metal is put in the Middle, and cover'd with an earthen Lid; and to increase the Force of the Fire, besides blowing it up with the Bellows, a Tyle is laid over Part of the Aperture, or Cavity of the Furnace.

The Metal being brought to a Fluid, the Crucible must be filled with Pieces of Brass, beaten in a Mortar; put into the Crucible with a Kind of Iron Ladle, with a long Shank at the End thereof, formed into a Kind of hollow Cylinder, out of which the Piece is dropped; which done, the *Founder* takes the Crucible out of the Fire, and carries it in a Pair of Iron Tongs (whose Feet are bent, the better to embrace the Top of the Crucible) to the Mould; into which he pours it, through the Hole answering to the Master-Jet of each Mould; thus he goes successively from one to another, till his Crucible is emptied, or there is not Matter enough left for another Mould. Then casting cold Water on the Moulds, they take the Frames out of the Presses, and the Cast-works out of the Sand, which they work again for another Casting. Lastly, they cut off the Jets, or Casts, and sell, or deliver them to those who bespoke 'em, without any farther Repairing.

From this we'll pass to the Casting of *Statues*, or *Figures*, for *Busts*, *Basso-Relievo's*, *Vases*, &c. for doing which, three Things are chiefly requir'd, *viz.* the Mould, Wax, Shell, and Coat; we have already given the Method how to make the Mould, and Coat. Therefore it remains only, before we go to work, to observe, that the Wax, if it be a Piece of Sculpture, must be all of the Sculptor's own Hand, who usually fashions it on the Core itself; though it may be wrought a-part in Cavities, moulded or formed on a Model, and afterwards disposed and arranged on the Ribs of Iron over the Grate, as before; filling the vacant Place in the Middle, with liquid Plaster, and Brick-Dust; by which Means, the inner Mould, or Core, is formed, in proportion as the Sculptor carries on the Wax; which is to be of the intended Thickness of the Metal, and by the Weight of the Wax us'd therein, is that of the Metal adjust'd; ten Pounds of this last, being used to one Pound of the former. When the Wax is finished, they fit little waxen Tubes perpendicularly to it, from Top to Bottom; to serve both as Jets for the Conveyance of the Metal to all Parts of the Work, and as Vent-holes to give Passage to the Air, which would otherwise occasion great Disorder, when the hot Metal comes to encompass it.

The Furnaces, Mould, and Coat, thus prepared, there remains nothing but to melt the Metal, and run it into the Mould, which is the Office of the Furnace above, with the three Apertures; and from that Aperture appointed to run the Metal out at, and which is kept very close all the Time the Metal is in Fusion; a little Tube or Canal is laid, whereby the molten Metal is convey'd into a large earthen Basin over the Mould, into the Bottom of which, all the big Branches of the Jets, or Casts, which are to carry the Metal into all the Parts of the Mould, are inserted. Which Jets are all terminated or stopped with a Kind of Plugs, which are kept close, that upon opening the Furnace, the Brass, which gushes out like a Torrent of Fire, may not enter any of them, till the Basin be full enough of Matter to run into them all at once: Upon which Occasion they pull out the Plugs, which are long Iron Rods, with a Head at one End capable of filling the whole Diameter of each Tube. The Hole of the Furnace is opened with a long Piece of

Iron, fitted at the End of each Pole, and the Mould filled in an instant.

The Work is now finished, at least so much as belongs to the Casting, the rest being the Sculptor's or Carver's Business; who taking the Figure out of the Mould and Earth it is encompassed withal, saws off the Jets with which it appears covered over, and repairs it with Instruments proper to his Art, as Chisels, Gravers, Puncheons, &c.

Note, That the Solution, or melting of Metals by Means of Fire, is called *Fusion*, from the *Latin fusio*, of *fundo*, I pour. To give the Ore its metallick Form, they fuse it; when it is in Fusion, the metalline Substance being the heaviest, sinks to the Bottom of the Furnace, the other terrestrial Matters rising in Form of *Scoria* to the Surface. It is usually imagined, that the Fusion, and metalline Form of Ores, is wholly the Effect of Fire, and we have Theories of Fusibility built on this Principle; but it is a mistaken one. Fire, no doubt, is the principal Agent; but Fire alone is not sufficient. A Mineral or Piece of Metal not purified, being put alone in a Crucible, melts with a World of Difficulty, and never becomes a perfect Metal; Copper Ore, for instance, being thus applied, its impure Part forms a *Scoria*, and vitrifies; the metalline Part residing at the Bottom, under the Appearance of a black Regulus. To promote the Fusion, and Separation, they mix Coals, Stones, Cinders, or old *Scoria* along with the Ore, the inflammable Principles in which by Help of the Fire, fuses them perfectly, sets the heterogeneous Part at Liberty, and raises it to the Top. The general Reason of Fusion is pretty easily assign'd. The Firmness or Solidity of a Body, arises from the Force wherewith its Particles cohere. And the Cohesion of all Bodies, is as the Quantity of Contact, to the component Particles. Now the Corpuscles of Fire entering with Rapidity into the Pores of the Metal, agitates, and by Degrees loosens, divides, and diminishes their Contact; till at length there is not enough to hinder their rolling over each other, and giving Way upon the least Impulse. The Dilatation observable in all Fusion, is a Proof that the Particles of the Bodies are separated, and set at a Distance from each other, and consequently their Contacts and Cohesions diminished. In Effect, Rarefaction and Dilatation, are the necessary Consequence of Fire and Heat. From the Difference of Cohesion proceeds the Variety we observe in the Fusion of Bodies; for such as have least Contact of Parts, soonest give Way to the Fire, and some will melt away by the Warmth of a Vapour only; when others, which have a stronger Contact, are not to be separated without much Difficulty; upon this Account, Vegetables very easily disunite; Minerals slower; and Metals slowest of all: And of the last, those wherein the Contact of Parts is least, as in Lead and Tin, most readily melt; but those which are more compact, as Gold and Silver, are not to be managed but by a violent Heat. If now the Force of Cohesion was proportionable to the Quantity of Matter, or to the Weight of Bodies, we might, from Staticks, account for all the Variety that occurs in Fusion: For by knowing the specifick Gravity of a Body, we should then know what Force is requir'd to melt it: But because the same Quantity of Matter may be so variously dispersed, that in one Body there shall be a much greater Contact than in another, tho' the Gravity be equal, or even greater in the latter; therefore the Force of Cohesion cannot be estimated by Gravity; for Lead, tho' more ponderous than all other Metals, except Gold, yet in the Fire is more easily melted than any other; so that it necessarily follows, that in this Metal there must be a less Cohesion, or Contact of Parts, how much soever it may exceed others in the Quantity of its Matter. Bodies after Fusion return again

again into a solid Mass, upon removing them from the Fire, because their Particles hereupon approach nearer to one another by their attractive Force, and are so compelled to unite. Such as consist of homogeneous and unalterable Parts, as Wax, Gums, and the purer Metals, recover their antient Form: For when the same Texture of Parts remain in the whole Body, it must of Course reassume the same Appearance, when the separative Power ceaseth to act; but other Bodies, whose Parts with respect to Density and Surface, are extremely different from one another, while some are carried off by the Force of the Heat, and others are changed as to Figure and Position, must be forced to appear in another Form; for they cannot recover their original Phases, unless every Particle could re-instate itself in that very Situation it had before, which may be hinder'd infinite Ways; as may be experienced easily in heterogeneous Bodies. The Difference therefore observed in homogeneous Bodies after Liquefaction, is no ways to be accounted for but from the Changeableness of Surface in their Parts; for those Bodies, whose Parts constantly retain the same Surfaces, never lose their Form; but others, by having the Surfaces of their Parts alter'd, have a different Texture, and put on another Appearance.

Note also, That the Art of casting Statues in Brass is very antient; insomuch that its Origin was too remote and obscure, even for the Re-search of *Pliny*, an Author admirably skilled in discovering the Authors of other Arts. All we can learn for certain, is, that it was practised in all its Perfection first among the *Greeks*, and afterwards among the *Romans*; and that the Number of Statues consecrated to the Gods and Heroes surpassed all Belief. The single Cities of *Athens*, *Delphos*, *Rhodes*, &c. had each 3000 Statues; and *Marcus Scaurus*, tho' only *Ædile*, adorned the *Circus* with no less than three thousand Statues of Brass, for the Time of the *Circensian Games*. This Taste for Statues was carried to such a Pitch, that it became a Proverb, that in *Rome* the People of Brass were not less numerous than the *Roman People*. Among us the Casting of Statues was but little known or practised before the seventeenth Century.

The Process is the same, in Proportion, in casting Bells, as in casting Statues; and all the Difference consists only in the Metal, and the Dimensions of the Core, and of the Wax. 1. The Metal is different, in that there is a fifth Part Tin in the Metal of Bells; and none at all in Statues. 2. The Dimensions of the Core and Wax are different, because they are not left to Chance, or the Caprice of the Workman (especially if it be a Ring of several Bells) but must be measured on a kind of Scale or *Diapason*, which gives the Height, Aperture, and Thickness, necessary for the several Tunes required. On the Wax are also form'd the Mouldings, and other Ornaments, and Inscriptions to be represented in Relievo, on the Outside of the Bell.

The Proportions of our Bells differ very much from those of the *Chinese*. In ours, the modern Proportions are to make the Diameter fifteen Times the Thickness of the Brim, and twelve Times the Height. The *Chinese* have an extraordinary Way of increasing the Sound of their Bells, viz. by leaving a Hole under the Cannon; which our *Bell-Founders* would reckon a Defect. The Clapper, or Tongue, is not properly a Part of the Bell, but is furnished from other Hands. In *Europe* it is usually of Iron, with a large Bunch at the Extreme, and is suspended in the Middle of the Bell. In *China* it is only a large wooden Mallet, struck by force of Arm against the Bell; whence they can have but little of that Consonancy, so much admired in some of our Rings of Bells. The Parts of a Bell are the Body, or Barrel, the Clapper within-side, and the Ear, or Cannon, whereby it is hung to a large Beam of Wood.

Note, That the Sound of a Bell, arises from a vibratory Motion of the Parts thereof, much like that of a musical Chord. The Stroke, or Clapper, it is evident, must change the Figure of the Bell, and of round make it oval; but the Metal having a great Degree of Elasticity, that Part which the Stroke drove farthest from the Centre, will fly back again, and this even somewhat nearer to the Centre than before, so that the two Points which before were the Extremes of the longer Diameter, now become those of the shorter. That the Circumference of the Bell undergoes alternate Changes of Figure, and by means thereof gives that tremulous Motion to the Air wherein the Sound consists. *M. Perrault* maintains, that the Sound of the same Bell, or Chord, is a Compound of the Sounds of the several Parts thereof: So that where the Parts are homogeneous, and the Dimensions of the Figure, uniform, there is such a perfect Mixture of all these Sounds, as constitutes one uniform, smooth, even Sound; and the contrary Circumstances produce Harshness. This he proves from the Bells differing in Tune according to the Part you strike; and yet strike it any where, there is a Motion of all the Parts. He therefore considers Bells, as composed of an infinite Number of Rings, which according to their different Dimensions, have different Tones, as Chords of different Lengths have: And when struck, the Vibrations of the Parts immediately struck, determine the Tone; being supported by a sufficient Number of consonant Tones in the other Parts.

Note also, That the first Bells are said to have been made at *Nola* in *Campania*, whereof *St. Paulinus* was Bishop; at least it is assured he was the first who brought them into the Church. And hence it is added, they had their Latin Name *Nolæ*, and *Campanæ*: But others say, they take these Names, not from their being invented in *Campania*, but because it was here the Manner of Hanging and Ballancing them, now in use, was first practised; at least that they were hung on the Model of a sort of Ballance, invented or used in *Campania*. For in Latin Writers we find *Campania Statera*, for a Steel-yard, and in the Greek *καμπανίζειν*, for *ponderare*, to weigh. *Polydore Virgil* ascribes the Invention of Church Bells to Pope *Sabinian*, *St. Gregory's* Successor; but by Mistake: For *St. Jerom*, Contemporary with *Paulinus*, makes mention of one. In effect, Pope *Sabinian*, did not invent Bells; but he was the first who appointed the canonical Hours to be distinguished by them. We even find mention made of Bells in *Ovid*, *Tibullus*, *Martial*, *Statius*, *Manilius*, and the Greek Authors, under the Appellations of *Tintinnabula*, and *sounding Brass*. *Suetonius*, *Dion*, *Strabo*, *Polybius*, *Josephus*, and others, mention them under the Names of *Petasis*, *Tintinnabulum*, *Æramentum*, *Crotalum*, *Signum*, &c. but these appear to have been no more than Bubbles, and little like the large Bells in use among us. *Hieronymus Magius*, who has a Treatise express on Bells (wrote, when in Chains, in *Turkey*, and which is accounted very remarkable, purely from his Memory without the Assistance of any Books) makes large Bells a modern Invention. Indeed we do not hear of any before the sixth Century: In 610, we are told, *Lupus* Bishop of *Orleans*, being at *Sens*, then besieged by the Army of *Clotharius*, frighten'd away the Besiegers, by ringing the Bells of *St. Stephen*. The first large Bells in *England* are mentioned by *Bede*, towards the latter End of that Century. They seem to have been pretty common in the Year 816. The *Greeks* are usually said to have been unacquainted with them till the ninth Century, when their Construction was first taught them by a *Venetian*. Indeed, it is not true, that the Use of Bells was entirely unknown in the antient Eastern Churches, and that they called the People to Church, as at present, with wooden

wooden Mallets. *Leo Allatius*, in his *Dissertation on the Greek Temples*, proves the contrary from several antient Writers. It is his Opinion, that *Bells* first began to be disused among them, after the taking of *Constantinople* by the *Turks*; who, it seems, prohibited them, lest their Sound should disturb the Repose of the Souls, which, according to them, wander in the Air. He adds, that they still retain the Use of *Bells*, in Places remote from the Inter-course of the *Turks*; particularly very antient ones in Mount *Athos*. Father *Simon* thinks the *Turks* rather prohibited the Christians the Use of *Bells* out of political, than religious Reasons; in as much as the Ringing of *Bells*, might serve as a Signal for the Execution of Revolts, &c.

The City of *Bordeaux* was deprived of its *Bells* for Rebellion: And when it was offered to have them restored, the People refused it, after having tasted the Ease and Conveniency of being freed from the constant Din and Jangling of *Bells*.

Matthew Paris observes, that antiently the Use of *Bells* was prohibited in Time of Mourning; though at present, they make one of the principal Ceremonies of Mourning. *Mabillon* adds, that it was an antient Custom to ring the *Bells* for Persons about to expire, to advertise the People to pray for them; whence our *passing Bells*. *Lobineau* observes, that the Custom of Ringing of *Bells*, at the Approach of Thunder, is of some Antiquity; but that the Design was not so much to shake the Air, and to dissipate the Thunder, as to call the People to Church, to pray that the Parish may be deliver'd from that terrible Meteor.

The Custom of Christening, or Blessing *Bells*, is very antient: Some say it was introduced by Pope *John XIII.* in 972; but it is evidently of an older Standing; there being an express Prohibition of the Practice, in a Capitular of *Charlemagne*, in 789. *Alcuin* says, it was long establish'd before the eighth Century: So that what has been said of *John XIII.* is only to be understood of an Order of that Pope for restoring the Practice which had been disused.

Nankin, a City of *China*, was antiently famous for the Largeness of its *Bells*; but their enormous Weight having brought down the Tower, the whole Building fell to Ruin, and the *Bells* have ever since lain on the Ground. One of these *Bells* is near twelve *English* Feet high, the Diameter seven and an half, and its Circumference twenty-three. Its Figure almost cylindrick, except for a Swelling in the Middle; and the Thickness of the Metal, about the Edges seven Inches. For the Dimensions of this *Bell*, its Weight is computed at 500,000 Pounds, which is more than double the Weight of that of *Erfort*, said by Father *Kircher* to be the greatest *Bell* in the World. These *Bells* were cast by the first Emperor of the preceding Dynasty, about 300 Years ago. They have each their Name, the Hanger *Tchoui*, the Eater *Che*, the Sleeper *Chaci*, the Will *Fi*. Father *le Conte* adds, that there are seven other *Bells* in *Pekin*, cast in the Reign of *Taoulo*, each of which weighs 120,000 Pounds. But the Sounds even of their highest *Bells* are very poor, being struck with a Wooden, in lieu of an Iron Clapper. The *Egyptians* have none but wooden *Bells*, except one brought by the *Franks* in the Monastery of *St. Anthony*.

The Uses of *Bells* are summed up in this *Latin* Distich:

*Laudo Deum verum, plebem voco, congrego clerum;
Defunctos ploro, pestem fugo, festa decoro.*

The Casting of *Cannons*, *Mortars*, and other Pieces of *Artillery*, is performed like that of Statues and *Bells*, especially as to what regards the Mould, Wax, Shell, Furnaces, &c. As to the Metal it is somewhat different from both; as having a Mixture of Tin, which is not in that of Statues; and only having half the Quantity of Tin that is in *Bells*, i. e. at the Rate of ten Pounds of Tin to a hundred of Copper. A *Cannon* is

always shaped a little conical, being thickest of Metal at the Breech, where the greatest Effort of the Gunpowder is made, and diminishing thence to the Muzzle: So that if the Mouth be two Inches thick of Metal, the Breech is six. Its Length is measured in Calibers, i. e. in Diameters of the Muzzle. Six Inches at the Muzzle require twenty Calibers, or ten Feet in Length: There is about $\frac{1}{8}$ of an Inch allowed Play for the Ball.

Note, That the Casting of Guns is quite modern; and it were perhaps to be wish'd we were as ignorant of it as the Antients. All Authors agree, that the first Cannon were cast in the fourteenth Century; tho' some fix the Event to the Year 1338, and others to 1380.

The two Things principally to be regarded in the Casting of printing Letters, are the *Matter* and the *Matrices*.

The *Matter* is a compound Metal; partly Copper, and partly Lead, mixed in a certain Proportion, which every *Letter-Founder* regulates at his own Discretion, and to which he frequently adds a certain Quantity of some other Metal, or Mineral, as his Experience directs him, to render his Composition the harder. The most usual Proportion of the two Metals, is a hundred Pounds of Lead to twenty or twenty-five Pounds of Brass. Some (though not the best *Founders*) use Iron instead of Brass; in the Proportion of a hundred Pounds of Lead, to thirty or thirty-five Pounds of Iron. These Metals are melted separately in large Crucibles; the Brass or Iron, with Antimony, and the Lead by itself. When in Fusion they are mixed together: This Fusion and Mixture are the most laborious Parts of the *Letter-Founders* Art.

The *Matrices* of the Letters are Pieces of Copper, whereon the Impression of the intended Character has been cut, or struck in Creux, by means of Puncheons, &c. graven in Relievo. Each Letter has its proper *Matrice*; and there are particular ones for Points, Virgula, Figures, Rules, Head-Pieces, and other Ornaments of Printing; excepting the Quadrats, which being only of Lead, and not intended to leave any Impression, are cast without *Matrices*, and only in Moulds; and each *Matrice* has its Puncheon made of Steel, or Iron well tempered. The *Matrices* being struck, and touched up, or repaired where needful, are put each at the End of the Mould, heretofore described.

This done, the Mixture or Composition, made in the Crucibles above-mentioned, is melted in a Basin or Copper, of about nine Inches in Diameter, placed over the Furnace, of which it takes the whole Aperture a-top; being even luted to it all around with Potters Earth. Its *Matter* is a Kind of Pot-Metal; and that it may be fit for melting both hard and soft Metals, it is divided into two equal Parts, by a perpendicular Partition. A little Iron Ladle serves to skim off the Scoriæ or Impurities from the Surface of the melted Metal; which Scoriæ are not all lost, but serve to melt over again.

Two Workmen are usually employ'd at each Furnace: Each of them has its Part of the Basin to empty; and they have a Table or Bench in common, where they lay the Characters as fast as they are cast. To run the Metal into the Mould, the Founder holds it in his left Hand; and in his right, a little Iron Ladle, with a wooden Handle, containing just enough for one Letter. Having now fill'd this Ladle with liquid Metal, he pours it into the Jet or Funnel, whose Aperture is in the Middle of the two Hooks of the Mould; and thrusting his Hand briskly forward, wherewith he holds the Mould, makes the Metal run into the *Matrice* of the Character; which without such Motion might grow cold before it arrived there. He then unbends the Bow, opens the Mould, and with one of the Hooks takes out the Character; and without Loss of Time shuts it again, replaces the *Matrice*, and casts a new Letter. It is incredible with what Expedition and Address all this is done.

The Letter being cast, they view it before they break off the Jet, to see whether it be perfect; otherwise to throw it among the Refuse of the Fount. If it be found compleat, the Jet or Tail is broke off; the superfluous Metal, occasioned by the Moulds not being exactly closed, taken off with a Knife; the long Tail Letters, as *f* and *j* hollowed at Bottom, to give Room for the Massive of the other Letters to be plac'd underneath. With the same Knife they scrape the Letter to smooth its two broadest Sides, or Faces, and fit them to be rubb'd on the Stone. They take Care only to rub those Sides, for fear of damaging a Notch on one of the other Sides, which is to distinguish the Sides to the Compositor when he sets his Forms.

The Stone they grind them on, is a Sort of hard, coarse-grain'd Free-stone, placed horizontally; before which the Workman sits. To save his Fingers from the Friction, he has a Kind of Finger Stalls, made of some old Piece of Leather; with which he covers the two Fingers next the Thumb; with these he works each Side of the Letter backwards and forwards: To shift Sides, he makes Use of the Thumb, but without discontinuing the Motion; so that the By-stander would easily be deceived, and be ready to swear they had all the while rubbed on the same Side.

The Letters thus ground, are placed on the Compository, to be scraped and brought to the proper Thickness, on the two other Sides, *viz.* that of the Notch, and its opposite. This they sometimes call *Composition*.

Note, That the *Compository* is a wooden Ruler, with a little Ledge at Bottom, against which the Letters are ranged. On the same Instrument, the Quadrats, Rules, Borders, &c. are adjusted.

When the Letters are compos'd, they remain to be justified, both as to Thickness and Height; which Justification is made with a little Copper-Plate, which is their Level.

The Justification as to Thickness, is made on a Piece of Marble; and that for the Height on an Iron Compository. The Justification of the Height is guided by the *m* of some Body of Characters already justified. Letters are said to be of their just Height, when the Part of the Plate, or Level, bears equally on the Standard *m*, placed on its Foot, in the little Compository, and the Face of two Letters, newly cast, placed aside of it to be justified.

As to the Thickness, the Justification is performed by laying the Standard Letter flat on the little Marble, and two new Letters aside of it, and thus levelling the three with the Plate.

All that remains is to dress the Letters, *i. e.* to cut the Foot, or rather hollow it, and make that Sort of Groove which every Letter has at Bottom, precisely opposite to the Eye, upper Part, or Face of the Letter. In order to this, they turn a long Line of them upside down in the Justificator: Which is an Instrument of polished Iron, or Steel, consisting of two long Pieces join'd together by Screws. Between these two they enclose as many Letters as it will hold, all placed against each other, in the same Situation as when compos'd for Books; excepting that the Face in the former Case is downwards, and the Foot a-top. When the Justificator is full of Letters, they set it on the Table of the Cutter, between two Cheeks of Wood; which pressing it very tight, enables the Workman to run his Plane along the Line of the Letter thus inverted. This Plane consists of three Parts, two Steel,

and the third Wood. Of the Steel ones, that at Bottom consists of two moveable Steel Plates, which may be drawn closer, or set farther off at Pleasure, by Means of two Screws. Within the Interval between the two, they pass the Feet of the Row of Letters; and thus is the Plane kept from deviating. The second Part of the Plane answering to the Bit of Steel in the common Planes, consists of two Branches, and two Screws, which serve to raise, or let down the Steel, as the Groove is to be cut deeper or shallower. The Position of this Piece of Steel, which is four or five Inches long, is almost perpendicular. The last Part of the Plane which is Wood, serves to join the other two, its Form is that of an Arch: One End of it is fasten'd to the posterior Extreme of the Plate, and the other to the Branches which carry the Bit of Steel: So that the three Parts together, make a Kind of Triangle, voided in the Middle. The Cutter is a Steel Instrument, with a wooden Handle in Manner of a Chissel, serving to pare off the rough Wire Edge of the Letters when they are dress'd.

The Letters are now fit for the Printer's Use, the Perfection thereof consists in their being all severally square and strait on every Side; and all generally of the same Height, and evenly lin'd, without stooping one Way or other; neither too big in the Foot, nor the Head; well groov'd, so as the two Extremes of the Foot, contain half the Body of the Letter; well ground, barbed, and scraped with a sensible Notch, &c.

Note, That a Set, or Quantity of Characters, or Letters of each Kind, among Printers, is called *Font*, or *Fount*. A compleat *Fount*, does not only include the running Letters, but also Majuscules, or large and small Capitals, single Letters, double Letters, Points, Comma's, Lines, Borders, Head-Pieces, Tail-Pieces, and numeral Characters. The *Letter-Founders* have a Kind of List, or Tariff, whereby they regulate their *Founts*. The Occasion whereof is, that some Letters being in much more Use, and oftener repeated than others, their Cells or Cases should be better filled and stored, than those of the Letters which do not return so frequently. Thus the *o* and *i* for Instance, are always in greater Quantity than *k* and *z*. This Difference will be better perceived from a proportional Comparison of those Letters with themselves, or some others. Suppose a *Fount* of a hundred thousand Characters, which is a common *Fount*, here the *a*, should have 5000; the *c*, 3000; the *e*, 11000; the *i*, 6000; the *m*, 3000; the *k*, only 30; and the *x*, *y*, and *z*, not many more. But this is only to be understood of the Letters of the lower Case; those of the upper having other Proportions, which it would be here too long to insist on.

Note also, That one of the most celebrated *Letter-Founders* in Europe, is Mr. William Caslon, a Person, who, though not bred to the Art of *Letter-Founding*, has by Dint of Genius, arriv'd at an Excellency in it, unknown hitherto in England; and which would even be admir'd at the King of France's Printing-House at Paris; the Characters whereof, were thought, before those of Mr. Caslon appear'd, the neatest and finest in Europe; though at present, I question much, if those of Mr. Caslon were used on as good Paper as those of the *Louvre* commonly are, if they would not be esteem'd preferable to them.

FOWLING.

FOWLING, is the Art of catching Birds with Nets, Birdlime, Decoys, and other Devices; as also of Breeding up the same.

The most necessary Implements of the Art of

Fowling, are Nets, Birdlime, Decoys, &c.

The Nets must be made of the best Pack-Thread, with great and large Meshes, at least two Inches from Point to Point; for the larger the Meshes are (so that

the Fowl cannot creep through them) the better it is; for they are more apt to entangle them. The Nets ought not to be above two Fathom deep, and six in length, which is the greatest Proportion a Man is able to overthrow. They must be verged on each Side with very strong Cord, and extended at each End upon long Poles made for that Purpose.

BIRDLIME is a viscid Substance, prepar'd various Ways, and from various Materials; in *England* it is made from Holly Bark, boiled ten or twelve Hours; when the green Coat being separated from the other, it is covered up a Fortnight in a moist Place, then pounded into a tough Paste, that no Fibres of the Wood be left, and washed in a running Stream, till no Moats appear, put up to ferment four or five Days, skimmed as often as any Thing arises, and laid up for Use.

The *Birdlime* brought from *Damascus*, is supposed to be made of Sebestens, their Kernels being frequently found in it; but this does not endure either Frost or Wet. That brought from *Spain* is of an ill Smell; that of the *Italians* is made of the Berries of the Mistleto heated, mixed with Oil to make it bear Water, they add Turpentine. It is said the Bark of Viburnum, or way-faring Shrub, makes *Birdlime* as good as the best.

To make the *Birdlime* bear Water, a Pound of it must be washed in Spring-Water, till made very pliable; and beaten afterwards, till no Water is perceived in it; and after it has been well dried, it is put in an earthen Pot, mix'd with as much Capon's Grease as will make it run; to which are added, two Spoonfuls of strong Vinegar, a Spoonful of the best Sallad Oil, and a small Quantity of Turpentine; those Ingredients must be increased, or diminished, in proportion to the Quantity of *Birdlime*. Being thus mixed together, they must be boiled gently over a slow Fire, stirring them continually: Then they are taken off the Fire and left to cool. This Sort of *Birdlime* is the best, especially for Snipes and Feldfares.

DECOYS, are Pipes, Whistles, and Calls, also a Place made fit for catching wild Fowl. Hence also a *Decoy-Duck*, is one that flies abroad, and lights into a Company of wild ones, and being become acquainted with them, by her Allurement draws them into the *Decoy Place*, where they become a Prey.

The *Fowler* being thus provided with his most necessary Implements, he must consider that there are two Kinds of Fowls, which are the Object of the *Art of Fowling*, viz. *Land* and *Water-Fowls*.

The *Water-Fowl*, are so called from the natural Delight they take in; and about the Water, where they most commonly dwell, and from whence they take all their Food or Nourishment. This Kind of *Fowls*, are naturally the subtlest, and wisest of all Birds, and most careful of their own Safety: Hence they have been compar'd to a Camp, having Scouts at Land afar off, Guards, Centinels, and all Sorts of other watchful Officers, surrounding the Body, to give an Alarm, on any Approach or seeming Danger. They always fly in Company, so that when a single Fowl, or a Couple fly together, they must have been separated from the rest, either by the Approach of Men, or the Beating of some Birds of Prey on the River. But though thus separated, they seldom leave Wing till they meet together again.

There are two Sorts of *Water-Fowls*, viz. those that live of the Water, and those that live on the Water. The one take their Food from the Water, by wading and diving for it with their long Legs, and without swimming thereon; the others are Web-foot, and swim, as the Swan, Goose, Mallard, &c.

It does not suffice for the *Fowler* to know how to distinguish his Fowls, but he must likewise know where to find them, and their respective Haunts; for the large *Water-Fowls* do not frequent the same Places, where the small ones are to be found.

The large *Water-Fowls*, or those which divide the Foot, frequent most commonly the Edge of shallow Rivers, Brooks, and Flashes of Water; and never fly in Company, but are to be found, here one, there a

Couple, and the like; which renders it difficult to take them by Decoys, Nets, or any other Implement of that Kind. They delight likewise in low and boggy Places, dry Parts of drown'd Fens, overgrown with tall and long Rushes, Reeds, and Sedges; half drown'd Moors, or the hollow Vales of Downs, Heaths, or Plains, where there is Shelter either of Hedges, Hills, Tufts of Bushes or Trees, where they may lurk obscurely.

Though it is very difficult to catch this Sort of Fowls, it is not absolutely impossible, since they can be caught either with Nets, or with Lime-Twigs.

To catch them with *Nets*, the *Fowler* must know where they feed in the Morning and Evening; and coming to the Place, two Hours at least before that Time, spreads his *Net* smooth and flat upon the Ground, staking the two lower Ends firm thereon, and leaving the upper ones extended upon the long Cord, the further End whereof must be staked fast down to the Earth, two or three Fathom from the *Net*, and the Stakes which stake down the Cord, stand in a direct and even Line with the lower Verge of the *Net*; then he shall hold in his Hand, at the uttermost Distance, the other End of the Cord, which must be at least ten or twelve Fathom long; there he must make some artificial Shelter either of Grass, Sods, Earth, or such like Matter, where he may lie out of Sight of the Fowl. He ought also to take Care to strew over all his *Net*, as it lies upon the Ground, some Grass, that he may hide it from the Fowl. It will not be improper to stake down near the *Net* a live Hern, or some other Fowl formerly taken for a *Stale*.

When the *Fowler* sees a sufficient Number of Fowls to come within the Verge of his *Net*, he ought then to draw suddenly his Cord, and so cast his *Net* over them; continuing to act in that same Manner, till the Sun be near an Hour high, and no longer; for then the Fowls feeding is over for that Time; but he may return in the Evening from about Sun-set till Twilight. By these Means he may not only take great Quantities of large wild Fowls, but also Plovers, which take their Food as much from Land as Water.

To take the same Fowls with *Lime-Twigs*, the *Fowler* must provide a good Store of long, small, and strait-grown Twigs, and very pliable, besmearing the upper Part thereof with *Birdlime*; and being very well acquainted where these Fowls frequent Morning and Evening, he must plant his Twigs in those Places, from Sun-set for the Evening Flight, and before Day for the Morning; pinning down for a *Stale*, one of the same Fowls alive. Round about the *Stale*, (which must have Liberty to flutter to and fro) the Twigs must be set in Rows, a Foot distant from one another (their Heads bending into the Wind, about a Foot or somewhat more above Ground) till the Place so haunted be all covered with them, that no Room may be left for the Fowls to escape.

When there is any Birds taken, the *Fowler* must not run instantly and take them up, if he sees some others in the Air, for by their fluttering, others will be induced to swoop in among them. He should also have along with him a well taught Spaniel, for the retaking of such Fowl as may chance to flutter away with the *Lime-Twigs* about them.

The lesser Fowls, which are web-footed, haunt continually drown'd Fens, where they may have Plenty of Water, and swim undisturb'd by Man or Beast; main Streams of Rivers, where the Current is swiftest and least subject to freeze; and the broader and deeper such Rivers are, the greater Delight these Fowls take therein, the Wild-Goose and Barnacle excepted, which never abide on Waters above their Sounding; for when they cannot reach the Ouze, they instantly remove thence, seeking out more shallow Places. These two last named, are extremely delighted with green Winter Corn; therefore they are to be search'd after where such Grain is sown, especially if the Ends of the Lands have much Water about them.

These

These smaller Fowls do also frequent much small Brooks, Rivers, Ponds, drown'd Meadows, Pastures, Moors, Loughs, and Lakes, especially if well stored with Islands unfrequented, and well furnished with Shrubs, Bushes, Reeds, &c. They frequent such Places Winter and Summer, and breed there.

To take these smaller Fowls with *Nets*, they must be pitch'd for the Evening Flight before Sun-set, staking them down on each Side of the River, about half a Foot within the Water, the lower Side of the *Net* being so plumb'd, that it may sink so far and no farther: Its upper Side is to be placed slantwise, shoaling against the Water, yet not touching it by near two Foot. The Strings which support this upper Side, ought to be fasten'd to small yielding Sticks set in the Bank, which as the Fowl strikes may give Liberty to the *Net* to rangle and entangle them.

Several of these *Nets* may be placed over divers Parts of the River, at a competent Distance from one another, or as the River or Brook shall give Leave.

To hasten the Fowls to fly to the *Nets*, the Fowler must fire his Gun in the Fens and Plashes, round about the River where they are placed; for thereby the Fowls will be so frightened, that they'll instantly post to the River.

Note, That the *Nets* for these smaller Fowls, must be made of the smallest and strongest Packthread, and the Meshes nothing near so big as those of the greater Fowls, about two Foot and a half or three Foot deep; lin'd on both Sides with false Nets, every Mesh being about a Foot and a half square each Way, that as the Fowl strikes, either through them or against them, the smaller Net may pass through the great Meshes, and so straighten and entangle the Fowl.

This Kind of Fowls are also taken with *Lime-Twigs*, by fitting them in Length according to the Depth of the River, besmearing them with very strong Water-Lime, such as no Wet or Frost can injure; and pricking them in the Water, so that as much of the Rod as is lin'd, be above Water; staking here and there among the Rods, a live *Stake*, as a Mallard, Widgeon, or Teal.

The Fowler needs not to wait continually on his Rods, but may come thrice a Day to see what is taken, viz. early in the Morning, at Noon, and late in the Evening; and then he must be accompanied with his Water-Spaniel; for if he perceives any of his Rods missing, he may imagine that some Fowls are fasten'd to them, which are crept in some Hole, Bush, or Hedge by the River Side, which his Dog will help him to find.

Note, That one Haunt must not be beaten too much, for when the Number of Fowls diminishes, the Fowler must remove to another, and in three Weeks Time, the first will be as good as ever.

Small *Water-Fowls* may also be taken by *small*, or *great Springs*, which is done in the following Manner.

Having took Notice where the Fowls feed Morning and Evening, of the Furrows and Water-Tracts where they usually stalk and paddle, to find Worms, Float-Grass Roots, and the like; the Fowler must mark where many Furrows meet in one, and break out, as it were, into one narrow Passage, which divides itself afterwards into other Parts and Branches: Then he marks how every Furrow breaks and comes into this Centre or little Pit, which is most paddled with the Fowl, or which is easiest for Fowl to wade in: This being done, he takes small and short Sticks, and pricks them cross-wise athwart over all the other Passages, one Stick within half an Inch of the other, making, as it were, a Kind of Fence to guard every Way but one through which he will have the Fowl to pass.

Having thus hemmed in all Ways but one, he takes a stiff Stick cut flat on the one Side, and

pricks both Ends down into the Water, making the upper Part of the flat Side of the Stick, to touch the Water and no more: This done, he makes a Bow of small Hazel, or Willow, of a Foot long, and five or six Inches broad, in the Form of a Pear, broad and round at one End, narrow at the other, making a small Nick at the narrow End: Then he takes a good stiff grown Plant of Hazel, free from Knots, three or four Inches about at the Bottom, and an Inch at the Top, and having sharpened the Bottom End, he fastens at the Top a very strong Loop of about an hundred Horse-Hairs, plaited very fast together with strong Packthread, and made so smooth that it will run and slip at Pleasure. Near this Loop he fastens a little broad Tricker, within an Inch and half of the End of the Plant, which he makes equally sharp at both Ends: He thrusts the bigger sharp End of the Plant into the Ground, close by the Edge of the Water; and brings the smaller End with the Loop and the Tricker down to the first Bridge, and then the Hoop being laid on the Bridge, one End of the Tricker is set upon the Nick of the Hoop, and the other End against a Nick made on the small End of the Plant, which by the Violence and Bend of the Plant, makes them stick together until the Hoop be moved. This done he lays the Swickle on the Hoop in such a Manner as the Hoop is proportioned; then from each Side of the Hoop pricks little Sticks, making an impaled Path to the Hoop; and as he goes farther from the Hoop and Spring, he makes the Way wider; therefore the Fowl can enter a good Way before he perceives the Fence, and thereby will be enticed to wade up to the Spring, which will be no sooner touch'd, than the Part of the Bird which touches it, will be presently catch'd; and thus according to the Strength of the Plant, a Fowler may take a Fowl of any Bigness.

The Spring for lesser Fowl, as Woodcock, Snipe, Plover, &c. is made after the same Manner, differing only in Strength, according to the Bigness of the Bird we intend to catch.

Note, That this Device is only for the Winter, when much Wet is on the Ground, and not when the Furrows are dry. When the Water is frozen, Plashes must be made; and the harder the Frost, the greater Resort there will be of these smaller Fowls.

There is another Method of *Fowling*, which is with a Gun, commonly called a *Fowling Piece*. The Fowler who will follow this Manner of *Fowling*, must not only provide himself with such a *Piece*, but likewise, with the best Sort of Powder, Shot, and a Water-Spaniel.

Of *Fowling-Pieces*, those are reputed the best, which have the longest Barrel, viz. from 5½, to 6 Foot; with an indifferent Bore under the Harquebus; tho' for different Occasions they should be of different Sorts and Sizes; but in all it is essential, the Barrel be well polish'd and smooth within, and the Bore of a Bigness from End to End; which may be prov'd by thrusting in a Piece of Wood, cut exactly to the Bore of the Muzzle, down to the Touch-Hole.

The Powder must not be too old, for keeping weakens it much, especially if it grows damp; therefore when there is Occasion to use it, it ought to be dried well in a Fire-Shovel, and sifted through a fine Searcher, to take away that Dust which hinders its most forcible Effects, and souls the Piece.

The Shot is to be well siz'd, and of a moderate Bigness, for if it be too big, it scatters too much; if too small, it has not Weight nor Strength enough to do Execution on a large Fowl. Shot not being to be had at all Times, and in all Places, as Occasions serve, we must direct our Pupil Fowler how to make it.

He must take what Quantity he pleases of Lead, melt it in an Iron Ladle, or other such Vessel, and as it melts keep it stirring, and skinning off all the Impurities which may rise at the Top, when it begins to

be of a greenish Colour, he must strew upon it Orpiment in Powder, as much as will lay on a Shilling, to twelve Pounds of Lead; and being stirred afterwards together, the Orpiment will flame. He must have another small Ladle with a Notch on one Side of its Brim, to pour out the Lead with more Facility; and that small Ladle ought to remain in the melted Lead, that the Heat may be agreeable to it, to prevent all Inconveniencies which may happen through Excess of Heat or Cold. To judge whether there be Orpiment enough in, a little of the Lead is dropt into a Glass of Water, and if the Drops prove round, and without Tails, there is Orpiment enough, and the Degree of Heat is as it should be.

This done, a Copper-Plate hollow in the Middle, and three Inches Diameter, bored through with 30 or 40 small Holes, according to the Size of the *Shot*, is placed on an Iron Frame over a Tub of Water, four Inches above the Water: The hollow Part is to be very thin. On this Plate are laid burning Coals, to keep the melted Lead in Fusion. The Lead is now poured gently with the Ladle on the Middle of the Plate, and it will make Way through the Holes in the Bottom of the Plate into the Water, in round Drops. Great Care is taken to keep the Lead on the Plate in its proper Degree of Heat: If too cold it will stop the Holes, and if too hot the Drops will crack and fly.

The *Shot* thus made, are dried over a gentle Fire, always stirring them that they do not melt: This done, the greater are separated from the smaller by passing them through Sieves for that Purpose.

Being thus provided with a good Fowling-Piece, Powder, and Shot, our Fowler wants but a good *Water-Dog*, to be entirely for the Sport.

The Goodness of a *Water-Dog* consists in his Colour, the Proportions of his Body; and in his being well taught, or trained to the Sport.

As for the Colour, we know by Experience, that a Dog of any Colour may be very excellent; but his Hairs must be long, curled, neither loose nor shaggy; his Head round and curled, his Ears broad and hanging, his Eye full, lively and quick, his Nose very short, his Lip Hound-like, his Chops furnished with a full Set of strong Teeth, his Neck thick and short, his Breast sharp, his Shoulders broad, his Fore-legs strait, his Chin square, his Buttock round, his Belly gaunt, his Thighs brawny, &c.

For the training such a Dog; as soon as he can lap, he must be taught to lie down, not daring to stir from that Posture without Leave, neither is he permitted to eat any Thing till he deserves it; nor allowed more Teachers, Feeders, and Cherishers than one. That Teacher must never alter the Word he first used in his Lessons; for the *Dog* takes Notice of the Sound not of the Language. When he is acquainted with the Word suitable to his Lesson, he must next be taught the Word of Reprehension; which at first should not be used without a Jerk. He must also be used to cherishing Words, which gives him Encouragement when he does well; and which ought to be always the same, and attended with spitting in his Mouth, stroking him with the Hand under the Belly, &c. There is also a Word of Advice to instruct him when he does amiss.

When the Dog understands well these several Words, he must be taught next to lead orderly in a String or Collar, neither running too forward, nor hanging backward. This Instruction is followed by that of coming close at his Master's Heels, without leading; for he must not range, unless it be to beat the Fowl from their Covert, or to fetch the Wounded.

His next Lesson must be to fetch and carry any Thing his Master throws to him out of his Hands. He must be tried first with the Glove, shaking it over his Head, and making him snap at it; and sometimes suffering him to hold it in his Mouth, and striving to pull it from him; and at last throwing it a little way, and letting him worry it on the Ground; and so by degrees making him bring it wherever it is thrown.

From the Glove he must be taught to fetch Cudgels, Bags, Nets, &c. It will not be amiss to use him to carry dead Fowls; for by that Means he will never tear or bruise what Fowl is shot.

The last Lesson which must be given, is to drop something which the Dog does not see; and being gone a little Way from it, send him back to seek it, by saying, *Back, I have lost*. If he appears amazed, he must be urged to seek out till he has found it. Then something must be dropped at a greater Distance, and he made to find out that too; till he is brought to go back a Mile.

To train him for the Gun, he must be made stalk after the Fowler Step by Step, or else couch and lie close till he has shot.

The last Use of the *Water-Dog* is in Moulting-time, when wild Fowls cast their Feathers and are unable to fly; which is towards the latter end of the Summer. At this Time the Dog must be brought to their Coverts, and hunt them out into the Stream; and there they will be taken in the Nets.

Our *Fowler* thus equipped, may take the Field for his Sport, with his Dog at his Heels under good Command, not daring to stir till he bids him; having first discharged his Piece: For some ill-taught Dogs will upon the Snap of the Cock, presently rush out and spoil all the Sport. He must observe, in shooting, to shoot with the Wind if possible, and not against it: And rather side-ways, or behind the Fowl, than full in their Faces. Choosing the most convenient Shelter he can find, as either Hedge, Bank, Tree, or any thing else, which may hide him from the View of the Fowl.

If he has not Shelter enough by reason of the Nakedness of the Banks and Want of Trees, he must creep upon his Hands and Knees under the Banks, and laying flat upon his Belly, put the Nose of his Piece over the Bank, and so take his Level; for a *Water-Fowl* is so fearful of a Man, that though a Hawk were soaring over her Head, yet at the Sight of a Man she would betake herself to her Wing, and run that Danger. But it happens sometimes that the Fowl are so shy, there is no getting a Shoot at them without a Skreen, or Device to hide the Fowler, and amuse the Game, while he gets within Shot.

This Device is called *Stalking*; and there is a *stalking Hedge*, a *stalking Horse*, a *stalking Tree*, &c.

A *STALKING Hedge*, is an artificial Hedge, two or three Yards long, and a Yard and half high, made with small Wands, to be light and portable, yet bushed out like a real Hedge, with Stakes to support it, while the Fowler takes his Aim.

STALKING Horse, is an old Jade train'd up for the Purpose, which will gently walk up and down as you would have him in Water, &c. beneath whose Fore-shoulder the Sportsman shelters himself and Gun. When thus got within Shot, he takes Aim from before the Fore-part of the Horse, which is much better than shooting under his Belly. To supply the Defect of a real *Stalking Horse*, an artificial one is frequently made of old Canvas, shaped in Form of a Horse, with his Head bent down, as if grazing; stuffed with any light Matter, and painted: In the Middle it is fixed to a Staff shod at the Foot, to stick into the Ground while Aim is taken. For Change, when the Fowls begin to be used to the *Stalking Horse*, and to know it, some *stalk* with an Ox, Cow, Deer, or the like. Others use a *stalking Tree* and others a *stalking Bush*.

Having done *Fowling* for *Water-Fowls*, we'll pass to *Fowling* for *Land-Fowls*; which, as well as *Water-Fowls*, are of different Sorts; for some are either fit for Food, as *Pigeons* of all Sorts, *Rook*, *Pheasant*, *Partridges*, *Quails*, *Rails*, *Feldsares*, &c. or for Pleasure only, as all manner of Birds of Prey, viz. *Catfrets*, *Ring-tails*, *Buzzards*, &c. or for Food and Pleasure together, as *Black-bird*, *Thrush*, *Nightingale*, *Linnet*, *Lark*, and *Bull-finch*.

These *Land-Fowl* of all Sorts are taken either by Day or by Night. If by Day, it is done with the great

great Net, commonly called the *Crow-Net*, not at all different in Length, Depth, Bigness of Mesh, Manner of laying, &c. from the *Plover-Net*; only it will not be amiss if the Cords be longer.

This Net may be laid before a Barn-door, or where Corn has been winnowed, or in Stubble-fields; and it must be hidden, that the Fowls may not discover the Snare. When the Fowler, who must lie concealed afar off, with the Cord in his Hand, perceives a Quantity of Fowls within the Net, scraping for Food, he must quickly pull the Net over them. But to succeed well in this manner of Sport, he must carefully observe the Morning and Evening Haunts of the Fowl, when they come to feed upon the Green-sward, and there lay his Net, where he will meet with as good Success as any where else; provided he takes Care to hide himself, and does not pull his Cord too hastily, but wait till he sees a good Number of Fowls within the Net, then pull freely and quickly; for the least Deliberation after the Net is rais'd, proves the Ruin of the Sport.

The *Land-Fowls* may also be taken with Lime-twigs, provided the Fowler takes Notice of the Haunts and Time, as he has done, when fowling for Water-Fowls: Then he pricks in the same Manner, his limed Rods slanting in even Rows, so that the Top may be within a Foot and a half of the Ground over the Haunts, one Row a Yard distant from another; then he has Sticks with Forks to stand pretty high, and cross Sticks over them, then he limes Strings, as he has done his Twigs, placing them some Rows higher than others, waving, and fastens the Ends with a sliding Loop, so that when the Fowl press upon them, and they are strained, they may loosen, and lap about them.

There is another Manner of taking Land-Fowls, especially small Birds, with Birdlime, particularly in Frost and Snow; for as those small Birds then assemble in Flocks, as *Larks*, *Chaffinches*, *Linnets*, *Goldfinches*, *Yellow-hammers*, *Buntings*, *Sparrows*, &c. they all, but the Lark, perch on Trees or Bushes, as well as feed on the Ground; which is, when they are perceived to resort about our House, or Fields, to take a Quantity of Wheat-Ears, and cut the Straw about a Foot long besides the Ears, liming them afterwards about six Inches, from the Bottom of the Ears, to the Middle of the Straw: Thus prepared, the Fowler must go into the Field adjacent to his House, and scatter Chaff and thresh'd Ears, which he has carried along with him, twenty Yards wide (it is best in Snow) and then stick the limed Ears up and down, with the Ears leaning, or at the End touching the Ground: Then he retires from the Place, and traverses the Ground round about; the Birds being thereby disturbed in their Haunts fly to the Ears, and pecking at them they stick; which perceiving, they straightways mount up from the Earth, and in their Flight the bird-limed Straws lay under their Wings, and falling are not able to disengage themselves from the Straw, and so are certainly taken.

Land-Fowls are taken by Night, with the Help of a low Bell, and of a Net, whose Mesh is twenty Yards deep; and so broad, that it may cover five or six Lands or more, according to the Company the Fowler has to carry it: This cannot be used but in plain champain Countries, from the End of *October* until the End of *March*.

With these Implements the Fowler goes into a Corn-field; he that carries the Bell, the foremost, tolling it as he goes, very mournfully; next follows the Net, borne up at each Corner and on each Side, by several Persons; then another carries some Iron or Earthen Vessel, with burning, but not blazing Coals in it; at which Coals Bundles of Straw must be lighted, unless one should chuse to carry Links. The Nets being pitched where the Game is supposed to lie, the Ground must be beaten, and a Noise made, at which the Fowls rise, and are entangled in the Net. Which done the Light is extinguished, and the Fowler proceeds to lay his Net in some other Place.

If the Fowler designs to have the full Pleasure of the Sport, he must be very silent, and nothing is to be heard but the Sound of the *low Bell*, till the Net is placed, and the Lights blazing; but as soon as they are extinguished, a general Silence must be observed again; for the *low Bell* makes the Birds lie close, so as they dare not stir whilst you are pitching the Net; but the Sight of the Fire makes them instantly to fly up, and thus they become entangled in the Net.

There is another Manner of taking Birds by Night, which roost in Bushes, Shrubs, Hawthorn-tree, &c. called *BAT-FOWLING*; and which is thus: The Fowler must be very silent till his Lights are blazing; and may chuse if he will carry Nets or not. If he carries none, he must have long Poles with great bushy Tops fixed to them; and having from a Vessel to carry Fire in, lighted his Straw or other blazing Matter, he must beat those Bushes where he thinks Birds are at Roost; which done, if there be any in those Bushes or Trees, he will instantly see them fly about the Flames, so that those who have the bushy Poles may beat them down at Pleasure, and take them up; and the Sport may be continued in this Manner as long as it is dark, and no longer.

Larks, *Buntings*, *Merlins*, *Hobbies*, and any Birds which will stoop either to Stale, Prey, Gig, Glafs, or the like, may be taken from *August* to *September*, with the *Day-Net*, which must be planted before Sun-rising; and the milder the Air, the brighter the Sun, and the pleasanter the Morning, the better will be the Sport, and of longer Continuance.

The Place chosen for this Kind of Sport must be a Plain, either on Barley Stubble, green Lays, and level and flat Meadows, remote from Villages, but near Corn-Fields.

These *Nets* being staked down with strong Stakes, tight on their Lines, so as to be cast to and fro at Pleasure, with a nimble Twitch, a dozen of Hand-lines, or drawing Cords, a Fathom long, must be fastened to the upper End of the foremost Staves, and extended of such reasonable Streightness, as with little Strength they may raise up the Nets and cast them over. When the Nets are laid, Stales, Decoys, or playing Wantons, must be placed twenty or thirty Paces beyond them, upon some perching Boughs, which will not only entice Birds of their own Feathers to stoop, but also Hawks, and other Birds of Prey, to swoop into the Nets.

Note, That a *Day-Net* must be made of fine Pack-thread, the Mesh small, and not above half an Inch square half-way; three Fathom in Length, and one in Breadth; like the *Crow-Net* in Shape; verged about in the same Manner with a small strong Cord, the two Ends whereof extended upon two small long Poles, suitable to the Breadth of the Net, with four Stakes, Tail-Strings, and Drawling Lines, as heretofore mentioned; only whereas that was but one single Net, here must be two of one Length, Breadth, and Shape. These *Nets* must be placed opposite to each other, yet so close and even together, that when they are drawn and pulled over, the Sides may touch one another.

Having given these Rules for taking every Species of *Water* and *Land-Fowl*, we'll descend into more particular ones, for catching some particular Birds, as *Snipes*, *Feldfares*, *Pigeons*, *Magpies*, *Crows*, *Gleads*, *Hérons*, *Pheasants*, *Partridges*, *Rails*, *Quails*, *Moor-poots*, &c.

To catch *Snipes* with Bird-lime, the Fowler must know the Places they frequent most, which is easily discovered by their Dung; and there set two hundred limed Twigs, more or less (especially if it be hard, frosty, or snowy Weather, where the Water lies open; for commonly they lie very thick in such Places.) The Twigs must be at a Yard distant from one another, and sloping, some one Way and some another; then the Fowler retiring at a convenient Distance from the Place, must wait the Success of the Sport, and not be too hasty to stir at the first he sees taken; for the *Snipe* will feed with the Twig under

his Wings, and be a Means to entice those down, who come over the Place. When he sees the Coast clear, and but few that are not taken, he must then take up his Birds, fastening one or two of them, that the other flying over, may alight at the same Place. If there be any other open Place near that where the Twigs are planted, they ought to be beaten up.

Felfares, as well as *Snipes*, are also Winter Birds, and are taken by setting a dead one at the Top of a great Birchen Bough, cover'd with small Lime Twigs, and planting the Bough where the *Felfares* resort in a Morning to feed. By this Means, others flying but near, will quickly espy the Top-Bird, and fall in whole Flocks to him.

To take *Rooks*, the Fowler must divide a Sheet of brown Paper into eight Parts, and having made them in the Shape of a Sugar-Loaf, lime a little the Inside; and after they have remain'd three or four Days thus lim'd, he must put some Corn in them, and lay them up and down the Ground under some Clod of Earth, early in the Morning before the Birds come to feed; then standing at a Distance, he'll see that as soon as the *Rooks*, *Crows*, or *Pigeons* come to pick out any of the Corn, the Paper will hang upon his Head, then the Bird will immediately fly bolt upright so high, that he shall soar almost out of Sight; and when he is spent, come tumbling down as if he had been shot in the Air. They may be taken in Ploughing Time, when the *Rooks* and *Crows* follow the Plough, but then Worms and Maggots of the largest Size must be put in the Paper.

Though the *Heron* be a Fowl neither for Pleasure nor for Food, as it is a ravenous one, and very destructive to Ponds, and Rivers, it is very necessary to give some Directions how to take it; which may be done by getting three or four small Roaches, or Dace, and drawing the Wire of a strong Hook within the Skin of the said Fish, beginning without Side of the Gills, and from thence to the Tail, which will not hinder the Fish from living five or six Days afterwards, for if it was dead, the *Heron* would not meddle with it. Then three or four of these Hooks must be tied to a strong Line, made of Silk and Wire, about two Yards and a half long, and likewise a round Stone about a Pound Weight; which whole Complement must be put in the River or Pond, but not so deep that the *Heron* cannot wade unto them.

Pheasants are taken three several Ways, viz. by Net, Lime-bush, or Driver.

Note, That Nets for *Pheasants*, must be made of double twin'd brown Thread, dy'd blue or green, the Mesh reasonably large and square, almost an Inch between Knot and Knot; its Length about three Fathom, and about seven Foot broad, verged on each Side with strong small Cord, and likewise at the Ends, that it may lie compass-wise and hollow.

In this Kind of Sport, the Fowler must, as in all others heretofore mentioned, know the Haunts of the Fowl, which are never in open Fields, nor in old high Woods, since *Pheasants* seldom frequent any other Place, but young Copses well grown; and of those, none but such as are solitary, and unfrequented by Men or Cattle. In these Places, the Eye or Brood of *Pheasants* is found, either by viewing carefully these young Copses, searching every where to discover where they run together like Chickens after a Hen; or by rising early in the Morning, or coming late in the Evening to observe how and when the old Cock and Hen call their young ones to them, and how the young ones answer; and so from that Sound the Fowler approaches as near as he can the Place where they are, lying down so close as not to be discovered, by which Means he will know where they meet, and how he may place his Nets accordingly. But the most certain Way of finding them out, is to have a *Pheasant-Call*, which he must learn how to use; understand all their Notes, and how to apply them: For *Pheasants* have several and different Notes, one

to cluck them together when the Hen would feed them, another to chide them when they straggle too far, a third to call them to Meat when she has found it, a fourth to make them look out for Food themselves, and a fifth to call them about her to sport withal. The Call may be used early in the Morning, at which Time they straggle abroad to find Provender; or else in the Evening just before Sun-setting, which is their Time likewise for feeding. Tho' they may be called at any other Time of the Day, by only changing Note; for as before Sun-Rising, and at its Setting, the Note must be to call them to feed; in the Forenoon, and Afternoon, it must be to call them to brood; or chide them for straggling, or give them Notice of some approaching Danger.

With all these necessary Instructions, the Fowler must lodge himself as close as possible, and then call at first very softly, lest the *Pheasants* being lodg'd very near him, should be frightened at a loud Note, but if nothing reply, he must raise his Note higher and higher, till he extends it to the utmost Compass, and if there be a *Pheasant* within hearing, she will answer in a Note as loud as his own, provided it be not untunable, for that would spoil all. As soon as he hears this Answer, if it be from afar, and from a single Fowl, he must creep nearer and nearer unto it, so will the *Pheasant* to him, and as he alters his Note so will she, and in all Points he must endeavour to imitate her, whereby he'll get Sight of her at last, either on the Ground or Perch; which got he ceases his Calling, and spreads his Net between the *Pheasant* and himself, in the most convenient Place he can find, with much Secrecy and Silence, making one End of the Net fast to the Ground, and holding the other End by a long Line in his Hand, whereby when any Thing strains it, he may pull the Net close together. This done he calls again, and as soon as he perceives the *Pheasant* come underneath the Net, he rises up and shews himself, whereby the *Pheasant* being frightened, offering to mount, finds herself entangled within the Net.

But if it happens that the Fowler hears many Answers, and from different Parts of the Wood, he must not stir, but keep his Place, and as he hears them by their Sound, to come nearer and nearer unto him, he must make his Nets ready, and spread them conveniently about him, one Net on the one Side, and another on the other; then lie close and apply himself to the Call, till he has allured them under his Nets, which done, he must stand up and shew himself, to fright them, and make them mount, whereby they are entangled.

Pheasant-Powts, or young *Pheasants*, are driven into Nets, with an Instrument made of strong white Wands, or Osiers, set fast in a Handle, twisted about in two or three Places, and bound with other Wands, in the Shape of those Things Cloth-Dressers usually dress their Cloth withal. With this Driver the Fowler must make a gentle Noise, raking upon the Boughs and Bushes round about him, which will make the *Powts* run from it a little Way, and then stand and listen, keeping all close together, till by another Rake of the Driver, they are made to run again as before, and by thus raking they will be driven like so many Sheep into the Nets, which must be placed across the little Pads and Ways which the Fowler sees they have made, which are like Sheep-Tracks, and as near their ordinary Haunt as possible, which may be discovered by the Bareness of the Ground, Matings, and loose Feathers.

Note, That two Things are to be observed in using the Driver; the first is Secrecy in concealing one's self from the Sight of the *Pheasants*; for if they chance to see the Fowler, they will instantly hide themselves in Holes and Bottoms of Bushes, and will not stir from thence till Night. The other is Circumspection in the Work, for nothing obstructs this Pastime more, than too much Precipitation or Haste, for *Pheasants* are fearful Creatures, soon

startle, and when once alarm'd, they all fly in an Instant, without staying to behold what they are so much afraid of.

To take *Pheasants* with a Lime-Bush, the Fowler having discover'd their Haunts, besmears the Top Branch of a Willow, or single Rod twelve Inches long, with the strongest Birdlime. The Branch must have a pretty long Handle, made sharp at Bottom to stick it into the Ground, or into Shrubs and Bushes; which must be done near the Branch or Tree, where the Pheasant perches. When the Bush or Rods are placed, the Fowler, lying close, takes out his Call. If the Call be good, and he knows how to use it, he will soon have all the *Pheasants* within hearing about him, and if one happens to be entangled, she will go near to entangle all the rest, either by her extraordinary fluttering, or their own Amazement and Confusion; and as they are taken by the Rods on the Ground, they will likewise be surpris'd with the Bushes, for being scar'd from below, they will mount to the Perch or Bushes, to see what becomes of their Companions, and there be taken themselves.

Note, That Lime is only for the Winter-Season, beginning from *November* when the Trees have shed their Leaves, and ending in *May*. Nets are used from the Beginning of *May*, till the latter End of *October*. So that there is no Time of the Year but their Breeding Time, which may not be employ'd in this Pleasure.

Partridges are also taken several Ways, either by *Net*, *Engine*, *Driving*, or *Setting*. They are naturally so fearful and simple, that they may easily be deceived, without any Train, Bait, or other Device.

The usual Haunts of *Partridges* (which the Fowler who wants to catch them must know) are Corn-Fields, either while the Corn grows, or after it is cut down; for when it grows, they shelter under its Covert; and when cut down, they are fed with the Grain they find therein. They also hide both themselves and Covies, in the Furrows, among Brambles and long Grass. In Winter, when the Fields are plough'd up, or over soil'd with Cattle, they fly to the up-land Meadows, and lodge in the dead Grass, or Fog, under Hedges, among Mole-Hills, or under the Roots of Trees. Sometimes they fly to Copfes, and under Woods, especially if any Corn-Fields be near; or where Broom, Brakes, Fern, &c. grows. In the Harvest Time, when every Field is full of Men and Cattle, they are found in Day-Time, in the Fallow-Fields, next to the Corn-Fields, where they lie lurking till the Evening, and then feed among the Shocks, or Sheaves of Corn, which they do likewise in the Morning.

When the Haunts of *Partridges* are known, the Fowler has several Ways to find them; either by the Eye, which Art cannot be acquir'd but by Experience, distinguishing thereby the Colour of the *Partridge* from that of the Earth, and in what Manner they lodge and couch together; for which Purpose, the Fowler may come near enough to them, for they are a very lazy Bird, and so unwilling to take to the Wing, that he may even set his Foot upon them before they will stir, provided he do not stand and gaze on them, but be in continual Motion, otherwise they will spring up and be gone. Or by going to their Haunts early in the Morning, or at the Close of the Evening, which is called the *Jucking Time*, and there listening for the Calling of the Cock *Partridge*, and for the Answering of the Hen, after which they meet together, which may be discovered at their Rejoicing, and Chattering; then the Fowler may take his Range about them, drawing nearer to the Place he hears them *Juck* in, and casting his Eyes towards the Furrows of the Land, he'll soon find where the Covy lies. Or by the *Call*, having first learn'd the true and natural Note of the *Partridge*, and how to tune it in its proper Key. Being perfect herein, he must frequent their Haunts, Morning and Evening, and

hiding himself in some secret Place, where he may see and not be seen, listens if he can hear the *Partridges* call; if he hears them, he must answer them in the same Notes, and imitate them as near as possible, as they change or double those Notes; continuing thus till they draw nearer unto him. Having them in View he lays himself on his Back, as if he was dead, without Motion, by which Means he may count their whole Number.

Having proceeded thus far, the next Thing he must do is to catch them. If he wants to do it with Nets, having found out the Covy, he draws forth his Nets, and taking a large Circumference, walks a good round Pace with a careless Eye, rather from them towards the *Partridges*, till he has trimmed his Nets, and made them ready for the Purpose; which done, he must draw his Circumference less and less, till he comes within the Length of his Net, then pricking down a Stick about three Foot in length, fastens one End of the Net to it, and walking about, letting the Net slip out of his Hands, he spreads it open as he goes, and thus lays it all over the *Partridges*. But if they should lay straggling, so that he cannot cover them all with one Net, he must draw forth another, and do with that as he has done with the former; which being done, he rushes in upon them, who frighten'd will fly up, and so be entangled in the Nets.

Note, That the Nets wherewith *Partridges* are ensnared, must be every Way like the Pheasants Nets, both for Length and Breadth, being made of the same Thread, and dy'd of the same Colour; only the Mesh must be smaller.

Partridges are taken with Birdlime, either in stubble Fields, from *August* till *Christmas*, or in Woods, Pastures, or Meadows. If in stubble Fields, the Fowler must take the largest Wheat-Straws he can get, and cut them off between Knot and Knot, and lime them with the strongest Lime. Then he goes to the Haunts of *Partridges*, and calls; if they answer he pricks at some Distance from him, his Lime-Straws in many cross Rows and Ranks across the Lands and Furrows, taking in two or three Lands at least; then lies close and calls again, not ceasing till he has drawn them towards him, so that they be intercepted by the Way by the lim'd Straws, which they shall no sooner touch, but they will be ensnar'd, and by reason they all run together like a Brood of Chickens, they will so besmear and daub one another, that very few of them will escape.

But if *Partridges* are to be taken in Pastures, Woods, or Meadows, the Rods must be limed as for *Pheasants*, and stuck in the Ground after the same Manner.

To drive *Partridges* into the Nets, which is one of the most diverting Manner of taking them, there must be made an Engine in the Shape of a Horse, cut out of Canvas, and stuffed with Straw, or such light Matter; with this artificial Horse, and the Nets, the Fowler must go to the Haunts of *Partridges*, and having found out the Covy, and pitch'd his Nets below, slopewise and hovering, he must go above, and taking the Advantage of the Wind, drive downwards. Then, with his Face cover'd with something green, or of a dark blue, and his Engine before him, stalk towards the *Partridges* with a slow Pace, raising them on their Feet, but not their Wings, and then they'll run naturally before him; if they chance to run a By-way, or contrary to his Purpose, they must be crossed with the Engine, and by thus facing they will run into that Track the Fowler would have them: Thus, by a gentle slow Pace, he may make them run and go which Way he pleases, and at last drive them into his Nets.

But the most pleasant of all the Manners of taking *Partridges*, is by a *Setting Dog*, which is a big Land-Spaniel, taught by Nature to hunt the *Partridge* more than any Chace whatever, running the Fields over with such Alacrity and Nimbleness, as if there was no Limit to his Fury and Desire, and yet by Art under such excellent Command, that in the very Height of

of his Career, by a *Hem*, or Sound of his Master's Voice, he shall stand, gaze about him, look in his Master's Face, and observe his Directions, whether to proceed, stand still, or retire: Nay, when he is even just upon his Prey, that he may even take it up with his Mouth, yet his Obedience is so fram'd by Art, that presently he shall either stand still, or fall down flat on his Belly, without daring either to make any Noise or Motion, till his Master comes to him, and then he will proceed in all Things to follow his Directions.

Note, That to train a Dog from a Whelp till he comes to that Perfection, you must choose him a Land Spaniel, of a good and nimble Size, rather small than great, and of a courageous Mettle, and tho' these good Qualities cannot be discern'd while young, yet they may be justly guessed at, from a right Breed, which have been known to be strong, lusty, and nimble Rangers, of active Feet, wanton Tails and busy Nostrils, whose Tail was without Weariness, their Search without Changeableness, and which no Delight did transport beyond Fear and Obedience.

When the Fowler has made Choice of his Dog, he begins to instruct him, while about four or six Months old; first by making him loving and familiar with his Master, to know him from any other Person, and following him wherever he goes: Which the better to effect, he must very seldom receive his Food from any other Hand but his; and when he corrects him, to keep him in Awe, he must rather do it with Words than Blows. A Dog thus instructed will follow none but his Master, and can distinguish his Frown from his Smile, and smooth Words from rough. Then he must teach him to lie down close to the Ground; first, by laying him often on the Ground, and crying, *lie close*: When he has done any Thing to his Master's Mind and Pleasure, he must be rewarded with a Piece of Bread; if otherwise, chastized with Words, but few Blows. After this, he must be taught to come creeping with his Belly and Head close on the Ground, as far, or as little a Way as his Master shall think fit; and this the Master may do by saying, *Come nearer, come nearer*, or the like; and at first, till he understands his Meaning, shewing him a Piece of Bread, or some other Food, to entice him. If he offers to raise his Body or Head, the Part thus raised must not only be thrust down, but he must likewise be threaten'd with an angry Voice; which if he seems to slight, two or three Jerks, with a Whipcord-Lash, must be added to the Voice. These Lessons must be often repeated, till he be very perfect, still encouraging him when he does well. If the Fowler walks abroad with his Dog, and he takes a Fancy to range, even when he is most busy, he must speak to him, and in the Height of his Pastime made fall upon his Belly, and lie close; and afterwards, come creeping. The next which must be given him, is to lead in a String or Line, and to follow his Master close at his Heels, without Trouble or straining of his Collar. By the Time the Dog has learn'd all these Lessons, he must be near twelve Months old; at which Time, the Season of the Year being proper, he must be taken into the Field and permitted to range, but still in Obedience to his Master's Command: But if through Wantonness he chances to babble or open without Cause, he must be sharply corrected, either with a Whipcord Lash, or pinching him hard at the Roots of his Ears.

Being brought to good Temper, and right Obedience; as soon as he comes upon the Haunt of any Partridge, (which is discover'd at his greater Eagerness in hunting, as also at a Kind of whimpering and whining in his Voice, being very desirous to open, but not daring) his Master shall speak to him, bidding him take Heed and the like:

But if, notwithstanding, he either rushes in, and springs the Partridge, or opens, and so the Partridge escapes, he must be corrected severely, cast off again, and made to haunt in some Haunts where the Fowler knows a Covy lies, and sees whether he has mended his Fault: And if any Partridge be catch'd with the Net, the Dog must have the Head, Neck, and Pinions, for his future Encouragement.

Having a Dog thus qualified by Art and Nature, the Fowler must take him where Partridges do haunt, cast him off, and by some Word of Encouragement wherewith he is acquainted, engage him to range, but never too far from his Master, who must see that he beat his Ground justly and even, without casting about, or flying here and there, which the Mettle of some will do if not corrected and reprov'd: Therefore when the Fowler perceives this Fault, he must presently call his Dog in with a *Hem*, and so check him, that he dare not do the like again for that Day, so he will range afterwards with more Temperance. If in the Dog's ranging he be perceived to stop on a sudden, or stand still, his Master must then make in to him (for without doubt he has set the Partridge) and as soon as he comes to him command him to get nearer, and if he goes not, but either lies still or stands shaking of his Tail, as if he would say, here they are under my Nose; and withal now and then looks back, then the Fowler must cease urging him further, and take his Circumference, walking fast with a careless Eye, looking strait before the Nose of the Dog, and thereby see how the Covy lies, whether close or stragling: Then commanding the Dog to lie still, he draws forth his Net and pricks one End to the Ground, and spreads it all open, and thus covers as many of the Partridges as he can. Which done he makes in with a Noise and springs up the Partridges, which no sooner rise but they are entangled with the Net. The Fowler must always let go the old Cock and Hen.

RAILS, QUAILS, MORE-FOOTS, &c. are taken in the same Manner as Partridges, either with Nets, lined Bushes or Rods, Engine, or a setting Dog. The Way of finding them is also the same, by the Eye, the Ear, and Haunt; though the chiefest of all is the *Call* or *Pipe*; to which they listen with such Earnestness, that you can no sooner imitate their Notes, but they will answer them, and pursue the *Call* with such Greediness, that they will play and skip about you, nay, run over you, especially the *Quail*. The Notes of the Male and Female differ very much; therefore the Fowler must have them both at his Command; and when he hears the Male call, he must answer in the Female's Note; and when the Female calls, answer in the Male's Note; and thus will have them both come to him. Their Haunts are also much like those of Partridges, only the *Quail* loves most the Wheat-Fields; the *More-poot* the Heath and Forest-Grounds; and the *Rails* the long high Grass, where they may lie obscure.

I'll conclude this Treatise of *Fowling*, by Teaching the Method of Catching, Preserving, and Keeping all Sorts of singing Birds, viz. the *Nightingale*, *Black-bird*, *Wood-Lark*, *Linnet*, *Chaffinch*, *Robin Red-breast*, *Starling*, *Tit-Lark*, *Bullfinch*, *Canary-bird*, *Thrush*, *Sky-Lark*, *Goldfinch*, *Green-finch*, *Wren*, *Red-start*, and *Hedge-Sparrow*. And as these Birds are subject to several Diseases, will give you some Prescriptions to cure them.

The NIGHTINGALE, for his Throat, is the *Farinelli* of the Woods; he appears at the latter End of *March*, or Beginning of *April*, and very few know where she retires in the Winter; some imagining that she sleeps all that Season. She builds her Nest commonly about two Feet above Ground, either in Quick-set Hedges, or in Beds of Nettles; hatching her young ones about the Beginning of *May*, and naturally delighting in cool Places, where small Brooks are garnished with pleasant Groves, where they sing melodiously till they have hatch'd, for then they grow Mutes; whence

whence this French Air, or Song :

*Rosignol to m'apprens cequ'il faut que je fasse,
Mon Cœur en t'imitant à de tendres amours,
Mais lorsque le Printems aura changé de face,
Tu sèsseras d'aimer, & j'aimeray toujours :
Tu sèsse de chanter ton amoureuse flame,
Lorsque tu vois le fruit de tes tendres amours ;
Mais je ne sèsse point dans le fonds de mon ame,
D'aimer, de soupirer, de me plaindre toujours.*

Nightingales must be taken out of their Nests ; when they are indifferently well fledged ; for if well feathered they will be fullen ; and if too little, they are so tender the Cold will kill them.

The Way of taking old and young is thus : For the Young, you must take Notice where the Cock sings ; and if he sings long the Hen is not far, who often betrays her Off-spring by being too careful : for when you come near her Nest, she will *sweet* and *cur* : If notwithstanding this you cannot find her Nest, stick a Meal-worm or two upon a Thorn, and laying down or standing, observe which Way it is carried by the old one, and drawing near, you'll hear the young ones while she feeds them. When you have found out the Nest touch not the Young ; for if you do, they will not tarry in the Nest.

The *Branchers*, or *Pushers* (thus called, because when thoroughly fledged, the old ones push them out of the Nest) are taken with a Bird-trap, or Net-trap, made with green Silk or Thread, about the Compass of a Yard, and in the Shape of a Shove-net for Fishes ; then a large Wire bended round, and the two Ends joined, must be put into a short Stick about an Inch and an half long, and a Piece of Iron, with two Cheeks and a Hole on each Side, through which must be ran some fine Whip-cord three or four Times double, that it may hold the Piece of Wood the faster, into which the Ends of the Wire are put, and with a Button on each side of the Iron the Whip-cord is twisted ; then the Net is fastened to the Wire, and the two Cheeks of the Iron joined at the Handle of a Board of the Compass of the Wire ; to which is added a Piece of Stick about two Inches long, with a Hole at the Top of it, which must have a Plug to put in, with two Wires to stick the Meal-worm upon ; then a String is tied in the Middle of the Top of the Net, which Net is to be drawn up, and having an Eye at the End of the Handle to put the Thread through, it must be pulled till it stands upright. When the Net and Worms are ready, having first scraped the Place, Ants must be put into the Trap-Cage ; which Cage is to be placed near the Place where the *Nightingales* are heard calling, and left there.

When the *Nightingales* are taken, the Ends of their Wings must be tied with some Thread, to hinder them from beating themselves against the Cage, which ought to be above half covered with green Bays, and they left for four or five Days undisturbed ; though they must be fed six Times a Day with Sheep's Heart and Egg shred very fine, and mingled with some Pismires ; and if thro' Sullenness they refuse to eat, their Bill must be forced open.

In the Summer they must be fed every Day with fresh Meat ; and when they begin to moult, with half an Egg hard boiled, and half a Sheep's Heart, mingled with Saffron and Water ; and sometimes red Worms, Caterpillars, Hog-Lice, and Meal-Worms.

The *Nightingales* taken in July or August, will not sing till the Middle of October, and then they will hold in Song till the Middle of June ; but those taken from the first of April to the twentieth, are the best Birds for Song. The *Nestlings* and *Branchers* (except they have an old Bird to sing over them) have not the true Song for the first twelve Months. When they are so tamed that they begin to *cur* and *sweet*, with Cheerfulness, and record softly to themselves, it is a certain Sign that they eat, one need not trouble himself with feeding them ; but if they sing before they feed, they commonly prove excellent Birds : Those which are long a feeding, and make no *curring* nor *sweeting*, are

not worth the Keeping. One which flutters, and bolts up his Head in the Night against the Top of the Cage ought not to be kept ; for he is not only good for nothing, but his bad Example will teach the best of Birds to do the like.

The best Sort of *Nightingales* frequent High-ways, Orchards, and sing close by Houses : These when taken will feed soonest, being more used to Company ; and after their feeding will grow familiar, and sing speedily.

To distinguish the Cock from the Hen ; the Cock, in the Judgment of some, is both longer and bigger : Others say, the Cock has a greater Eye, a longer Bill, and a Tail more reddish : Others pretend to know them by the Pinion of the Wing, and Feathers on the Head ; but these Rules are not so sure as the following ones ; viz. If a *Nestling* (before he can feed himself) records a little to himself, and in his recording his Throat is perceived to wag, he is a Cock ; but when they come to feed themselves, the Hen will record as well as the Cock. *Branchers*, whether Cocks or Hens, (when taken and do feed themselves) will record ; but the Cock does it much longer, louder, and oftner.

Nightingales are subject to several Diseases ; for if they are not kept clean, their Feet are clogg'd, their Claws rot off ; and they are subject to the Gout and Cramp. To cure them of these Diseases, their Feet must be anointed four or five Days with fresh Butter, and they will be well again. They are likewise troubled with Imposthumes and Breakings out about their Eyes and Neb, for which Capon's Grease must be used : If they be melancholy, some Liquorice with a little Sugar-Candy must be put in their drinking Pots.

The CANARY-BIRDS are originally from the *Canary-Islands* ; from whence they were brought into Europe. They are in Colour much like our Green-Birds, but differ much in their Song, and Nature ; for as other Birds are subject to be fat, the Cocks of these are always lean, by reason of the Greatness of their Mettle, and their lavish Singing : The best are long shaped, standing strait and boldly. There are no certain Rules to be given for the Choice of *Canary-Birds*, every one consulting his own Fancy ; for some like those that *wisk* and *chew*, like unto a *Tit-Lark* ; others are for those that begin like a *Sky-Lark*, and so continue their Song with a long, yet sweet Note ; others are for those that begin their Song with the *Sky-Lark*, and then run upon the Note of the *Nightingale*, which is very pleasant if he does it well : The last is for a loud Note, and lavish, regarding no more in it than a Noise ; but the long Song is the best, having most Variety of Notes. To discover if a *Canary-Bird* be in Health, before he is purchased, he must be taken out of the Store-Cage, and put into a clean one alone ; where if he stands boldly without crouching, without shrinking Feathers, and his Eyes looking brisk and cheerfully, these are good Signs of a healthy Bird ; but if he bolts his Tail like a *Nightingale*, after he has dung'd, it shews he is not well ; tho' he seems lively for the present, there is some Distemper near attending : Likewise, if he either dung very thin and watry, or of a slimy white, and no Blackness in it ; these are dangerous Signs of approaching Death.

Canary-Birds above three Years old are call'd *Runts* ; at two Years old they are call'd *Eriffs* ; and those of the first Year are call'd *Branchers* ; when they are new flown, and cannot feed themselves, they are call'd *Pushers* ; and those that are brought up by Hand, *Nestlings*. They take great Delight at *Paris* to set *Canary-Birds* to breed ; they have Cages made on Purpose, which they call *Cabanes*, where those Birds build, lay, and hatch their young.

The BLACKBIRD builds her Nest upon old Stumps of Trees by Ditch-sides, or in thick Hedges ; they are brought up almost with any Meat whatsoever ; but above all, they love Ground Worms, Sheep's Heart, hard Eggs, and white Bread and Milk mix'd together. This Bird sings somewhat more than three

Months in the Year; his Note is harsh and loud; therefore to add a Value to him, he must be taught to whistle.

There are five Kinds of Thrushes, *viz.* the *Mistle-Thrush*, the *Northern-Thrush*, or *Feldfare*, the *Wind-Thrush*, the *Wood-Song-Thrush*, and the *Heath-Thrush*.

The first is the largest of all five, and the most beautiful; but as he sings but little, and his Notes are rambling and confuse, he is not worth the Keeping. The second is the *Feldfare*, who comes into *England* before *Michaelmas*, and goes away about the Beginning of *March*. They breed upon certain Rocks near the *Scotish* Shore three or four Times a Year, and are there in very great Numbers: They are not so fit for the Cage as for the Spit, having a most lamentable untuned chattering Tone. The third is the *Wind-Thrush*, or *Whindie*, which travels with the *Feldfare* out of the North, is a smaller Bird, with a dark Red under his Wing. She breeds in Woods and Shaws as *Song-Thrushes* do, and has an indifferent Song exceeding the two former; but yet they are fitter for the Pot or Spit, than for a Cage or Avery. The fourth is the *Wood-Song-Thrush*, and sings most incomparably, both lavishly and with Variety of Notes; and sings at least nine of the twelve Months of the Year. They build about the same Time, Place, and Manner the *Blackbird* does; the Composure of her Nest is so marvellous that it cannot be mended by the Art of Men; besides the curious building, she leaves a little Hole in the Bottom of her Nest, to let out the Water, as may be supposed, if a violent Shower should come, that so her Eggs or young ones may not be drowned. If the Weather favours them, they go very soon to Nest, and breed three Times a Year, *viz.* in *March*, *April*, *May* and *June*; but the first Birds usually prove the best; which must be taken in the Nest when fourteen Days old, and kept warm and clean, not suffering them to sit on their Dung, but must be so contrived that they dung over the Nest. They are to be fed with raw Meat and some Bread chopped together with bruised Hemp-seed, wetting the Bread before it is mingled with the Meat. Being thoroughly fledged, they must be put in a Cage with two or three Perches, where they may have Room enough, and some Moss at the Bottom to keep them clean; for otherwise they will be troubled with the Cramp, and for Want of delighting in themselves their Singing will be spoiled. They must also have fresh Water twice a Week, that they may bathe and prune themselves therein, otherwise they will not thrive. The fifth and last is the *Heath-Thrush*, which is the least we have in *England*, having a dark Breast. Some are of Opinion, that this Bird exceeds the *Song-Thrush*, having better Notes, and neater Plume. The Hen builds by the Heath-side in a Fern-bush, or Stump of an old Hawthorn, and makes not Shaws and Woods her Haunt as other Thrushes do. She begins to breed towards the Middle of *April*, and breeds but twice in a Year; and if kept clean and well fed, will sing three Parts in four of the old Year. To know the Cock from the Hen, according to some, is to chuse the top Bird of the Nest, which commonly is most fledged. Others think that to be the Cock which has the largest Eyes and most Speckles on his Breast. Others chuse the Cock by the Pinion on his Wing; but the best Marks are a white Gullet with black Streaks on each Side, the Spots on the Breast large and black, and the Head of a light shining Brown, with black Streaks under each Eye, and upon the Pinion of the Wing.

The *ROBIN-RED-BREAST*, for Sweetness of Note, is very little inferior to the *Nightingale*: He is taken either in a Pit-fall, or with a Trap-Cage and a Meal-Worm. They breed very early in the Spring, and commonly twice a Year. When the young ones are about ten Days old they must be taken from the old ones, and kept in a little Bower-Basket. They are fed in all Respects like the *Nightingale*: When they grow strong they are put in a Cage, with Moss at the Bottom; but as they are very tender Birds the Cage must be lined, to keep them warm. The Cock has

his Breast of a darker Red, and his Red will go further up upon the Head than the Hen.

The *WREN* is a little Bird, as pleasant to the Ear as he is to the Eye: He builds twice a Year, about the latter End of *April*, in Shrubs where Ivy grows thick, and sometimes in old Hovels and Barns. They lay a numerous Quantity of Eggs. Their second Time of breeding is in the Middle of *June*; of either Breed, what you intend to keep must be taken out of the Nest at thirteen and fourteen Days old; and fed every Day very often, but a little at a Time, with Sheep's Hearts and Eggs minced very small; and when they begin to pick their Meat of their own Accord, off the Stick they are fed with, they must be caged, and Meat put in a little Pan, and about the Sides of the Cage, to entice them to eat, though they must be fed too, lest they neglect themselves and die. When they can feed themselves very well, a Spider or two must be given them once in three Days. The brownest and largest of the young *Wrens* are the Cocks.

The *WOOD-LARK*, is by some preferred to the *Nightingale*, because he has a great Variety of very excellent and pleasant Notes. The *Wood-Lark* breeds the soonest of any Bird, by reason of his extraordinary Mettle; therefore if they are not taken in the Beginning of *February* at least, they grow so rank that they will prove good for nothing. He delights most in gravelly Grounds and Hills lying towards the Orient, and in Oat-Stubs. Their Building is in Layers-Grounds, where the Grass is rank and ruffet, making their Nests of Ben-Grass, or dead Grass of the Field, under some large Tuffs, to shelter them from the Injury of the Weather. These Birds are never bred from the Nest, for they die in a Week either of the Cramp or Scowring. The Times of the Year to take them are *June*, *July*, *August*, with a Hobby, in this Manner: Go in a dewy Morning to the Sides of some Hills which lie to Sun-rising, where they most usually frequent, and having sprung them, observe where they fall, then surround them twice or thrice with your Hobby on your Fist, causing it to hover when you draw near, by which Means they will lie still till you clap a Net over them. If three or four go together, take a Net made in the same Manner as that for Partridges, when you go with a Setting-Dog, only the Mesh must be smaller, *i. e.* a Lark-Mesh, and then your Hobby is to the Lark what a Setting-Dog is to Partridges. Those taken in this Season are called *young Branchers*, because they have not moulted yet; and will sing presently, but will not last long, by reason of their Moulting.

Wood-Larks taken at the latter End of *September*, having then moulted cannot be distinguished whether old or young. Those taken in *January* and *February* will sing in five or six Days, or sooner, and they are the best, being taken in full Stomach, and are more perfect in their Song than those taken in other Seasons.

Upon the first taking of the *Wood-Lark*, two Pans must be put into the Cage, one for Sheep's Heart minced small, and mingled with Bread, Egg, and Hemp-seed; and another for Oatmeal and whole Hemp-seed. The Bottom of the Cage ought to be covered with red Gravel, which must be shifted every Week at furthest, and the Perch lined with green Bays; and lest they should not find the Pan soon enough, to prevent Famine, there must be strewed upon the Sand some Hemp-seed and Oatmeal; and if they grow poor at the Beginning of the Spring, there must be given to them every two or three Days a Turf of three-leaved Grass. The Cock is distinguished from the Female, by the Largeness and Length of his Call, by his tall Walking, his strong Singing, and the doubling of his Notes in the Evening.

These Birds are very subject to the Cramp, Giddiness in the Head, and lousy. The best Remedy to prevent the Cramp is to shift the Cage often with fresh Gravel, otherwise the Dung will clog to the Feet, which causes the Cramp. The Giddiness of the Head proceeds from feeding upon much Hemp-seed, and is cured with Gentles, or Hog-Lice, Lemmets and their Eggs,

Eggs, with Liquorice, all put into Water. Louziness is cured by sinoaking Tobacco.

The SKY-LARK is a hardy Bird, and will live upon any Food, provided he has once a Week a Turf of three-leav'd Grass. *Sky-Larks* commonly build in Corn, or thick high Grass Meadows, and seldom have more than four young ones, which they hatch towards the Middle of May. They must be taken when a Fortnight old, and fed at first with minc'd Sheep's Hearts, mix'd with hard Eggs; when they can feed alone, they eat Hemp-Seed and Oatmeal; they must have Sand in the Bottom of their Cage, and no Perch.

Sky-Larks are taken either with a Net and Hobby, or a Trammel, or a Pair of Day-Nets and a Glass, or with a Low-Bell, or with Pack-Thread.

The Trammel is only used in dark Nights, and is above six and thirty Yards long, and six Yards over, run thro' with six Ribs of Pack-Thread; which Ribs at the Ends, are put upon two Poles sixteen Feet long, made taper at each End, and so is carried between two Men half a Yard from the Ground, to cause the Birds to fly up, otherwise the Net might be carried over them without disturbing them; when they are heard fly against the Net, it must be clapp'd down. The Day-Nets are commonly seven Feet deep, and fifteen long, knit with French Mesh, and very fine Thread. These Nets take all Sorts of small Birds that come within their Compass, as *Bunting Larks*, and *Linnets* in Abundance. To take *Larks* with the low Bell, the Bell and a great Light in a Tub, must be both carried by one Man, and the Net by another; this Bell and Light so amazes them, that they lie as dead, and stir not till the Net over-cast them. To take them with Pack-Thread, a hundred, or two hundred Yards of Pack-Thread must be provided, when there is Abundance of Snow upon the Ground, fastening at every six Inches, a Noose made with Horse-Hairs, two Hairs are sufficient.

Larks, design'd to be kept for singing, must be taken in *October*, or *November*, chusing the straitest, largest, and loftiest Bird, and he that has most White on his Tail, for these are the Marks of the Cock.

The LINNET builds his Nest in Thorn-Bushes, and Fir-Bushes, and some of the hotter Sort will breed four Times a Year. The young ones may be taken at four Days old, if you intend to teach them to whistle, or learn the Song of other Birds, for being so young they know not the Tune of the old Bird; then they must be kept very warm, and fed often, and a little at a Time, with bruis'd and soak'd Rape-Seed, mixed with an equal Quantity of white Bread. The Cock is known from the Hen by the Brownness of his Back, and the White of his Wing; that is to say, take your young *Linnet* when the Wing-Feathers are grown, and stretch out his Wing, holding his Body fast with the other Hand, and then observe the White upon the fourth, fifth, and sixth Feather; if it cast a glistering White, and it goes quite to the Quill, it is a sure Sign of a Cock.

This Bird is subject to several Diseases, as the Phthisick, known by his panting, staring Feathers, lean Breast, and spilling his Seeds up and down the Cage. Which Disease happens for Want of Water, or for Want of green Meat in the Spring: He is troubled also with Strains, or Convulsions of the Breast; sometimes with Hoarseness, being over-strain'd in singing; sometimes he is melancholy, at others Times afflicted with Scouring, of which there are three Sorts, the first is thin, or with a black or white Substance in the Middle, not very dangerous; the second is between a black and white, clammy and sticking, this is bad; but the third and last is most mortal, which is the white clammy Scouring.

The GOLD-FINCH breeds commonly in Apple Trees, and Plumb Trees, thrice a Year. *Gold-finches* are taken in great Plenty about *Michaelmas*, and will soon become tame. The young ones are taken with the Nest at ten Days old, and fed with the best Hemp-Seed pounded, sifted, and mix'd with the like Quantity

of white Bread, with some Flour of Canary-feed. They must be kept very warm till they can feed themselves.

The TIT-LARK appears at the same Time of the Year as the Nightingale does; which is the Beginning of *April*, and leaves us at the Beginning of *September*. He breeds about the latter End of *April*, or the Beginning of *May*, and builds his Nest on the Ground by some Pond or Ditch. The *Tit-Larks* are fed; when taken, as the Nightingale. They are easily brought up, being hardy, and are not subject to Colds or Cramps, but live long if preserved with Care. The Song of this Bird is short and sweet.

The CHAFFINCH builds his Nest in Hedges, and Trees of all Sorts, and has young ones twice or thrice a Year, which are seldom bred up from the Nest, because they are not apt to take another Bird's Song, or to whistle. The *Chaffinch* has but one short plain Song.

The STARLING; to be excellent, must be taken from the old ones at the End of three or four Days; for if taken fledg'd out of the Nest, they retain too much of their own natural harsh Notes. They learn to whistle, or speak, or other Bird's Song, by hanging under him.

The REDSTART, is a Fore-runner of the Nightingale, and is of a very sullen dogged Temper in a Cage, but abroad is very cheerful, and has a pleasing Kind of whistling Song. These Birds build usually in the Holes of hollow Trees; or under House-Eaves. They must be taken out of the Nest about ten Days old, and fed with Sheep's-Heart and Eggs chop'd together. If the *Redstart* be kept warm in the Winter, they will sing as well in the Night as the Day. They breed thrice a Year, the latter End of *April*, in *May*, and towards the latter End of *June*. The Cock is fair, and delightful to the Eye.

The BULLFINCH has no Song, nor Whistling of his own, but is very apt to learn any Thing, if learn'd with the Mouth.

The GREENFINCH breeds three Times a Year, very fillily by the Highways, and early before the Hedges have Leaves upon them, which exposes their Nests to publick View, so that seldom their first Nests comes to any Thing. The young ones are very hardy Birds to be brought up, and may be fed with white Bread and Rape bruised and soaked. The *Greenfinch* is a beautiful Bird, but very dull; and will never kill himself either by singing or whistling; therefore is not worth keeping for his Song.

The HEDGE-SPARROW builds in a white Thorn, or private Hedge, laying Eggs of a fine blue Colour. These Birds are taken at the latter End of *January*, or Beginning of *February*, and will feed almost on any Thing. They are very tractable, and will take any Bird's Song, if taken young out of the Nest. Old or young they will become tame very quickly; so that it is not so despicable a Bird as some will have it.

Note, That the *Sterling* is the best Bird for whistling; That the *Robin-red-Breast* whistle and speak: And that the *Canary-Bird*, will learn to whistle almost any Thing if taken young out of the Nest, otherwise not; for he being a very hot-mettled Bird, he will run upon his own Song do what you can. That the *Linnet* will learn almost any Tune if not too long, and too full of Variety.

Note also, That as to the Length of Birds Lives; among *Nightingales*, some live but one Year, some three, some five, some eight, and some twelve, singing better and better for the first seven or eight Years, and afterward decline by little and little. The *Wood-Lark* seldom lives in a Cage above six Years. The *Robin-red-Breast* rarely lives above seven Years, for he is a tender Bird, and much subject to the falling Sickness, Cramp, and Oppression of the Stomach. The *Sky-Lark*, as he is a hardy Bird, so he is long-liv'd also. All Sorts of Seed-Birds live longer than any soft beaked Birds, especially the *Canary* and *Linnet*; for the *Canary* and *Linnet* live and sing within a Year of twenty.

FULLING.

F U L L I N G.

FULLING, is the Art of Cleansing, Scouring, and Pressing Cloths, Stuffs, and Stockings, to render them stronger, closer, and firmer.

Fulling is done with a *Mill*, called *Fullers Mill*, which, excepting what relates to the Stone and Hopper, is much the same as a Corn-Mill. The principal Parts of this *Fullers Mill*, are the Wheel with its Trundles, which gives Motion to the Tree or Spindle, whose Teeth communicate it to the Pestles, or Stampers, which are hereby rais'd, and fallen alternately, according as its Teeth catch on, or quit a Kind of Latch in the Middle of each Pestle. The Pestles and Troughs are of Wood, each Trough having at least two, sometimes three Pestles, at the Discretion of the Master, or according to the Force of the Stream of Water. In these Troughs are laid the Cloths, Stuffs, &c. intended to be *fulled*; then letting the Current of Water fall on the Wheel, the Pestles are successively let fall thereon, and by their Weight and Velocity, stamp, and press the Stuffs very strongly; which by this Means becomes thickened and condensed. In the Course of the Operation, they sometimes make Use of Urine, sometimes of *Fullers Earth*, and sometimes of Soap.

Note, That *Fullers Earth*, is a fatty, fossil Earth, abounding in Nitre, dug in great Plenty out of certain Pits, near *Brickhill* in *Staffordshire*; also near *Ryegate* in *Surry*; near *Maidstone* in *Kent*; near *Nulley* and *Petworth* in *Sussex*; and near *Wooburn* in *Bedfordshire*. That it is absolutely necessary to the well dressing of Cloth; and hence Foreigners, who can procure Wool to be exported out of *England*, can never reach to the Perfection of the *English* Cloths, &c. without *Fullers Earth*. For this Reason it is made a contraband Commodity; and the Export made equally criminal with that of exporting Wool. Abroad they make a great Use of Urine, in lieu of *Fullers Earth*, which is very prejudicial, and ought to be entirely discarded; not so much on Account of its ill Smell, as of its Sharpness and Saltness; which is apt to render the Stuffs dry and harsh.

In *France* they *full* Cloaths and woollen Stuffs with Soap, according to the Method deliver'd by *M. Colinet*, supported by Experiments made by Order of the *Marquis de Louvois*, then Superintendent of the Arts and Manufactories of *France*; the Substance of which is as follows: A colour'd Cloth of about forty-five Ells, is to be laid in the usual Manner, in the Trough of a *Fulling Mill*, without first soaking it in Water, as is commonly practised in many Places. To *full* this Trough of Cloth, fifteen Pounds of Soap are requir'd; one half of which is to be melted in two Pails of River or Spring Water, made as hot as the Hand can well bear it. This Solution is to be pour'd by little and little upon the Cloth, in proportion as it is laid in the Trough: And this is to be *fulled* for at least two Hours; after which it is to be taken out and stretched. This done, the Cloth is immediately re-

turn'd into the same Trough, without any new Soap, and there *fulled* two Hours more. Then taking it out, they wring it well to express all the Grease and Filth. After the second *Fulling*, the Remainder of the Soap is melted as the former, and cast at four different Times on the Cloth; remembering to take out the Cloth every two Hours to stretch it and undo the Plaits and Wrinkles it has acquir'd in the Trough. When they perceive it sufficiently *fulled*, and brought to the Quality and Thickness requir'd, they scour it out for good in hot Water, keeping it in the Trough till it be quite clean. As to white Cloths, in regard these *full* more easily, and in less Time than colour'd ones, a third Part of the Soap may be spared.

The *Fulling* of Stockings, Caps, &c. should be performed somewhat differently, *viz.* either with the Feet or the Hands; on a Kind of Rack or wooden Machine, either arm'd with Teeth of the same Matter, or else Horses or Bullocks Teeth. The Ingredients made Use of herein, are Urine, green Soap, white Soap, and *Fullers Earth*. But the Urine also is reckon'd prejudicial here. Woven Stockings, &c. should be *fulled* with Soap alone: For those that are knit, Earth may be used with the Soap. Indeed it is frequent to *full* these Kinds of Works with the Mill, after the usual Manner of Cloths, &c. but that is too coarse and violent a Manner, and apt to damage the Work, unless it be very strong.

Cloths, Stuffs, Stockings, &c. thus *fulled*, have their Wool or Nap carded or drawn with a Kind of Plant called *Teazel*, or *Teasel*, *Carduus Fullonum*, the *Fullers Thistle*, in order to render them closer and warmer. This Plant is cultivated with great Care in several Parts of *France*, particularly *Normandy*; and the Exportation thereof prohibited, by Reason of the vast Use thereof in the woollen Manufacture; the Stem is very high: And its Extremity, as also those of its Branches, bears an oblong, prickly, yellowish Ball or Bur, which is the Part used. The largest Burs, and those most pointed, are esteem'd the best, and are now called *Male Teazles*, mostly used in the dressing and preparing of Stockings and Coverlets; the smaller Kind, properly called the *Fullers* or *Drapers*, and sometimes the *Female Teazel*, are used in the Preparation of the finer Stuffs, as Cloths, Rattens, &c. The smallest Kind, sometimes called *Linnet's Heads*, are used to draw out the Nap from the coarser Stuffs, as Bays, &c.

The Art of *Fulling* was invented, according to *Pliny*, *Lib. 7. c. 56.* by one *Nicias* the Son of *Hermias*: And it appears by an Inscription quoted by *Sir George Wheeler*, in his Travels through *Greece*, that this same *Nicias* was a Governor in *Greece*, in the Time of the *Romans*.

The *Fullers* among the *Romans*, washed, scoured and fitted up Cloaths, and their Office was judg'd of that Importance, that there were several Laws prescrib'd them for the Manner of performing it: Such was the *Lex metalla de fullonibus*, &c.

G A M I N G.

GAMING, is an Art reasonable in its Institution, mutable in its Principles, and often very dangerous in the Practice.

I say that *Gaming* is reasonable in Institution, since it may be supposed it was first invented for an honest Recreation. That it is mutable in its Principles, since no Sort of Games has infallible ones, but are all founded on the Inconstancy of our Mind, and often but ridiculous Caprices. It is dangerous in the Practice,

since *Gaming* puts all our most criminal Passions into a Ferment, makes us sometimes appear rather like Furies vomited from Hell, than rational Men; and causes the entire Ruin of an infinite Number of Families, which from an opulent State, it reduces to Beggary.

Gaming is applied either to Games of Exercise and Address, or those of Chance, or Hazard. To the first belong Tennis, Billiards, Chess, Bowls, Cudgels,

Cudgels, Wrestling, Quoits, Shooting with Bows, &c. To this belonged also the antient *Just*, and *Turnament*.

Under the second comes *Cards, Dice, &c.* and under *Cards*, several subordinate Games; the principal whereof are, *Ombre, Picquet, Basset*, and *Wisk*.

To begin with those of Exercise, *TENNIS* is supposed one of the most noble, as being the most in Vogue among Persons of Fashion, tho' very fatiguing; since those who exercise themselves at it, tho' commonly in their Shirt, sweat, notwithstanding, so violently, that when the Practice is over, they are forced to change Shirt, and be rubb'd by Servants kept on Purpose in the *TENNIS-COURT*, which is a long and broad Alley or Court, pav'd with large and flat Stones, and cover'd over; with Galleries, or Piazzas, on both Sides, for the Spectators, or those who bet. The Game is perform'd with Battlers and Balls, and consists chiefly in the Agility and Dexterity of the Gamesters, in catching and throwing the Ball.

BILLIARDS (from the *French Billard*, of *Bile*, the Ball made Use of; and that from the *Latin Pila*, a Ball) is an ingenious Kind of Game, play'd on an oblong Table, covered with green Cloth, and placed exactly level, with little Ivory or wooden Balls, which are driven by crooked Sticks, made on Purpose, into Hazards or Holes on the Edges and Corners of the Table, in *French* called *Blouzes*. There are three of those Holes or *Blouzes* on each Side of the Table, one at each Corner, and one in the Middle. The whole Secret of this Game consists in Lodging the Ball of our Antagonist, in one of these Holes, or *Blouzes*, and avoid having ours lodg'd there. When we *blouze* our Antagonist, we get two Points, or Numbers of the *Partie*, which commonly is of seven, and when he lodges our *Bille*, or Ball, we lose two. If we miss touching the Ball of our Antagonist, we lose one; and if when both Balls are close together, as it happens often, we touch the Ball of our Adversary, at the same Time we touch ours, we lose one also. If we throw his Ball off the Table, which the *French* call *Faire Sauter*, we get two; but if at the same Time, or at any other, we throw off ours, we lose two. One's Adversary is distressed in several Manners, 1. By *blouzing* him. 2. By nailing his Ball close against the Side of the Table. 3. By bringing it upon the Edge of a Hole, that he may run the Risk of *blouzing* himself, in attempting to *blouze* us, or miss touching our Ball.

To play well at *Billiards*, the Gamester must understand perfectly well how to use his *Masse* and also the Tail, when his Ball is nailed close against the Side of the Table, or so near that of his Adversary, that he cannot use the *Masse* without running the Risk of touching the Ball of his Adversary, as well as his own. He must also endeavour, as much as possible, to touch always the Ball of his Adversary in full, for when he touches it corner-wise, tho' he sometimes *blouzes* his Adversary, he seldom misses of *blouzing* himself also. He should besides understand how to draw Perpendiculars, Diagonals, and equilateral Lines with his Eyes, either to touch always the Ball, or to lodge it in the Hazards, or *Blouzes*; and he is not to be unacquainted with the Faults of the Billiard Table, if it has any. Formerly that Table was all level; but the *French*, to render the Game more difficult, have incumbered the Middle thereof with an Iron Rod, placed arch-wise, with only Room for one Ball to pass thro' it.

Note, That the Game of *Billiards* caused the Ruin of the Chevalier *de Rohan*, at the Beginning of *Louis XIV's* Reign (a Prince who was a great Lover of that Game) and made the Fortune of *Chamillard* towards the End of the same Reign. The Chevalier *de Rohan*, a Nobleman of an illustrious House of *Britanny*, was then great Equery to the King, and his Favourite besides, and as such was at all his Parties of Pleasure; particularly at *Billiards*. One Day the King made one of the Conditions of

the Game that the Loosers should pay, in *French Louis d'Or*, and not in *Spanish Pistoles*, though they had at that Time Currency in the Kingdom at the Rate of the *French Louis d'Or*; but were not of the same intrinsic Value, because they were either clipped, or counterfeited. The Chevalier play'd that Day against the King, and lost an hundred *Louis d'Ors*; but either not remembering the Conventions made, or having at that Time no other Gold by him but *Spanish Pistoles*, he sent to the King's *Cassette*, as it is called in *France*, which is the Money allow'd for the King's Pleasures, or Diversions, an hundred *Spanish Pistoles*, instead of an hundred *Louis d'Ors*. The King, always well pleased when he won, and careful of informing himself if the Losers have been punctual in their Payments, being inform'd that the Chevalier had sent an hundred *Spanish Pistoles*, chid him the next Day in a gentle Manner, for his having not fulfilled the Conditions agreed upon. The Chevalier, piqued at the Reproach, though made without the least Design to offend him, sent immediately one of his Gentlemen, who attended, for a hundred *Louis d'Ors*, which he deliver'd to a Lord there present, who kept the King's Money, who at the same Time return'd him his hundred *Spanish Pistoles*; which the Chevalier had no sooner receiv'd, but he open'd a Window, and threw them away, saying, that if that Money had no Course at a Billiard-Table, it was not worth keeping. The King, who took that for an Affront, told the Chevalier he was impertinent, and commanded him to withdraw. This was the Cause of all the Misfortunes which befel the poor Chevalier afterwards, and which brought him at last to lose his Head on a Scaffold; for having enter'd into a Conspiracy with *Madame de Villars* at *Latreaumont*, and several others for the Enlevement of the Dauphin, this King's Grandfather, to deliver him into the Hands of the *Dutch*. It was supposed then, that if the Chevalier could have been prevailed upon to ask the King's Pardon, for his first Indiscretion, he had been receiv'd into Favour again; but he was a true *Briton*, *i. e.* had too great a Heart to be persuaded to humble himself, when he thought he had not offended.

Chamillard met with a quite different Fate, at the same Place, and in the same Company, for having found the Secret to please the King by his great Dexterity in playing at *Billiards*, his Majesty took him into Favour, and imagined afterwards, that *Chamillard* could manage his Finances with the same Dexterity, he did a *Masse*, but he was mistaken; it is true, that like a true Gamester he played then a Game for himself; where the King his Master, was always on the Loser's Side.

Chess, is an ingenious Game, where Art and Address are so indispensably requisite, that Chance seems to have no Place, and a Person never loses but by his own Fault.

Note, That *Sarrasin* has a precise Treatise on the different Etymology, or the Origin of the *Latin Schacchi*, whence the *French Echecs*, and the *English Chess*, is formed. *Manage* is also very full on the same Head. *Leunclavius* takes it to come from *Ufcoches*, famous *Turkish* Robbers: *P. Sirmond* from the *German Scache*, Theft; and that from *Calculus*. He takes the *Chess* to be the same with *Ludus Latrunculorum* of the *Romans*, but mistakenly. This Opinion is countenanced by *Vossius* and *Salmasius*, who derive the Word from *Calculus*, as used for *Latrunculus*. *G. Tolosanus* derives it from the *Hebrew Schach*, *vallavit & mat mortuus*; whence *Chess* and *Chess-mate*; *Fabricius* says, a celebrated *Persian* Astronomer, one *Schatrenschah*, invented the Game of *Chess*, and gave it his own Name; which it still bears in that Country. *Nicod* derives it from *Scheque*, or *Xequ*, a *Moorish* Word for Lord, King and Prince: *Bochart* adds, that *Scach* is originally,

ginally *Persian*, and that *Scachmat* in that Language signifies the King is dead. The Opinion of *Nicod* and *Bochart*, which is likewise that of *Scrivener*, appears the most probable.

The Theatre upon which this Game, if acted, is a chequered Board, half black and half white, like a Draught-Board; and by two little Armies drawn up in Order of Battle, opposite to each other; each Army is commanded by a King (which is seldom practised at present, except at *Chefs*) and several great Officers, in all (the King included) eight principal Persons.

The *King*, as may be very well imagined, is the first in Rank and Order; next to him stands the *Queen*, two *Rooks* next; next to the two *Rooks*, two *Knights*; two *Bishops* next, which the *French* call *les fous* (but why the *French* have made Fools of *Bishops*, and the *English* made *Bishops* of Fools, is what I will not pretend to determine; for it could not be imagined that the *English* have made *Bishops* of Fools, because those Pieces which the *French* call Fools, and the *English* *Bishops*, have no regular March, but jump from one Side to the other as it suits best their Conveniency.) The next are the *Pawns*, who though they are no other than common Soldiers, yet when they are well commanded, perform sometimes great Actions.

The Method of drawing up this little Army, is to place the principal Pieces on the lowest Rank of the Board next to the Gamester, *viz.* the *King* first upon the fourth Spot from the Corner, which is white; the *Queen* on the black Spot on his Right; the two *Bishops*, one next the *King* and the other next the *Queen*; the *Knights* on the Sides of the *Bishops*, and the two *Rooks*, one in each Corner. The *Pawns*, which are also eight in Number, are placed just in the Rank before those illustrious Persons, to serve as their Rampart. The other Army is drawn up on the opposite Side in the same manner; and lest they should not be distinguished when they are engaged, one Army is always clothed in *Black*, the other in *White*.

The *KING* (whose Pace ought always to be very grave and modest, though without Affectation) never moves but from one Chequer to another; forward in a Line, or side-ways in a Line, or backward in a Line. If he meets with any Scout of the Enemy in his Way, he may take him Prisoner, and place himself where he stood; and when it is his Turn to move again, he may go backwards, side-ways, or retire. The *King* can also, the first Motion, pass over one Chequer, but after that he can only move from Chequer to Chequer.

The *QUEEN*, provided the Passage be clear, may pass from one End of the Board to the other at one Movement, either in a Line forwards, or in a Line Side-ways; and if any of the Enemy stands in her Way, she may take him Prisoner, and stand in his Place.

The *BISHOP*, has a Motion hard to be described upon Paper, for it is neither directly forwards, nor altogether side-ways, but betwixt both; it is an oblique Movement, he may either move from Chequer to Chequer, or run along a whole Row, according as he sees an Advantage to snap an Enemy. One *Bishop* stands upon a black Chequer, and the other upon a white; but he who stands upon a black Chequer must always move upon the black Row, without touching the white; as he who stands upon a white, must always move on the white Row, without touching the black.

The *KNIGHT* has but one Way of moving, which is that of jumping from Black to White, and from White to Black: In this Motion he jumps over one Chequer, not directly forward, but moves in the Form of a Demi-circle; and if one of the Enemy should stand next to him, he can jump over his Head.

Note, That an Officer, or a Pawn of the Enemy, may stand next to a Knight or Bishop without Danger; for these being confined to one Way of moving, can hurt nothing but what lies directly in

that Way. But *Note* also, That this Rule is observed no where else but at *Chefs*.

The *KNIGHT* is of great Use in the Beginning of the Battle; for very often he makes a Passage through the Enemy's Army, and forces his Way up to the King, whom he attacks, and to whom he gives *Cheque-Mate*; but at the latter End of an Action, he has not the same Opportunity of exercising his Valour; therefore the best Play is to employ him at first.

Note, That giving the King *Cheque-Mate*, is putting him in Danger; for whenever the King's Person is in Danger of being taken by the Enemy, out of respect to Royal Majesty, Notice must be given him, by saying *Cheque*, that so he may either retire or cover himself with some of his Men; for when he is taken, his Army is lost, and there is an End of the Game. If those who put the Enemy's King into this Danger should omit saying *Cheque*, they cannot take him.

The Motion of the *ROOKS* is in a direct Line every Way, they can neither cross the Chequer as the *Bishops* do, nor hop like the *Knights*: They may either move from Chequer to Chequer, or else as far as the Passage is clear. If any of the Enemy stands in their Way to interrupt their March, they may take him Prisoner, and stand in his Place, as all the others must when they take a Prisoner, till the next Movement. By their being placed one at one Corner, and the other at another Corner of the lowest Row, in the same Rank with the other Commanders, they defend the Flanks of the Army, and guard the Quarters of the King and his Officers; but they are seldom put upon Action till after several Skirmishes and Repulses; and are generally of more Service than any, except the *Queen*.

The eight *PAWNS*, at the first Movement, may, if it be thought necessary, pass over two Chequers, reckoning that they come from, one; but afterward they can only move from Chequer to Chequer in a direct Line forwards: But if one of the Enemy should stand next to one of them in an oblique Manner, they may take him. And if any of them should make his Way up to the first Rank of the Enemy, he is immediately preferred and made an Officer; and the *King* may prefer him to the Post of any Officer he has lost. If the *Queen* herself had been taken Prisoner, she must be exchanged for this *Pawn*.

Note, That the general Rules to be observed in playing at *Chefs*, are, 1. To play at the Beginning with a great deal of Caution, and not too open, as if there was no Danger while the Enemy is at a Distance; since the *Queen*, a *Bishop*, and a *Rook*, can take a Prisoner from one End of the Board to the other, if he lies uncovered. 2. That, as it is impossible to proceed without exposing the Men or Officers, a good Player will give up an inferior Officer to take a superior one from the Enemy. For instance, he'll play his *Knight* just in the Mouth of a *Rook*, when he has placed another Officer in Ambuscade to surprize the *Rook*. 3. A good Player endeavours always to get behind the Enemy, to attack the *King*, and give him *Cheque-Mate*; that by this Means he may either take him, or block him up, and so win the Game. 4. The *King* can be chequered two Ways; the first is a *simple Chequer*, when the *King* can either retire out of Danger, or cover himself with an inferior Man, or take that Man which chequers him: The second is, when the *King* is so besieged and over-power'd, that he can neither move nor defend himself, nor cover himself with another: This is called *Cheque-mate*, in which Case the Game is lost.

Note also, That there are several particular Rules given by Captain *Joseph Bertin*, as will perfect those who are somewhat skilled in the Game of *Chefs*; which Rules are these: 1. The *Pawns* of the *King*, *Bishop*, and *Queen*, must move before the *Knights*; for were they to move last, the Game would be crowded

crowded by useless Removes. 2. The *Queen* is not to be plaid till the Game be well opened; since otherwise some Moves would be lost. 3. For the same Reason useless Checks ought not to be given. 4. Upon being well posted, either for Attack or Defence, no Opportunity of taking your Adversary's Men must tempt you, for this may divert you from gaining the main Design. 5. Do not castle, but when very necessary, because the Move is often lost by it. 6. Never attack or defend the King without a sufficient Force; and take Care of Ambushes and Traps. 7. Never crowd your Game by too many Men in one Place. 8. Consider well before you play, what Harm your Adversary is able to do you, that you may oppose his Designs. 9. To free your Game, take off some of your Adversary's Men if possible, for nothing; though to succeed in your Design, you must often give away some of your own, as Occasion serves. 10. He who plays first, is understood to have the Attack. When the Game is opened you must endeavour to defend in your Turn; for the Defence, if well played, is still the best against the *Gambets*, in which you change all your Pieces except the *Gambet* that gives three *Pawns*, which will be necessary to keep a *Rook*, to conduct your *Pawns* to the *Queen*. 11. A good Player ought to foresee the concealed Move, from 3 to 5 and 7 Moves. The concealed Move is a Piece that does not play for a long Time, but lies snug in hope of getting an Advantage. 12. At the Beginning of a Game you may play any *Pawn* two Moves without Danger. 13. The *Gambet* is, when he who first gives the *Pawn* of the King's Bishop in the second Move, for nothing, the other keeps it, or takes another for it, if he is obliged to lose it. 14. The *close Game* is, when he that plays first, gives no Men, unless to make good Advantage; but in giving a *Pawn* first, he loses his Advantage. 15. He who castles first, the other must advance his three *Pawns* on the Side of his Adversary's King, and back them with some Pieces, in order to force him that Way, provided his own King or Pieces are not in Danger in other Places. 16. When your Game is opened, to gain the Attack, you must present your Pieces to change; and if your Adversary, who has the Attack, refuses to change, he loses a good Situation; and either in exchanging or retiring, the Defence gets the Move: *Ex. gr.* in the Beginning of a Game, to shew the Necessity of playing the *Pawns* before the Pieces, if there were but two *Pawns* on each side of the Board, *viz.* the *Pawns* of the *Rooks*, the first that should play would soon win the Game, by taking the other Pieces by Check; and that Situation may come in less Number of Pieces. 17. To play well the latter End of a Game, you must calculate who has the Move, on which the Game always depends. 18. To learn well and fast, you must be resolute to guard the *Gambet* *Pawn*, or any other Advantage against the Attack; and when you have the least Advantage you must change all, Man for Man. A Draw-Game shews both Players to be good.

Note also, That these Rules are of great Service in the Practice of the Games; and will prevent making any useless Moves; but Rules for Over-sights are not to be given.

Being supposed well instructed in those general and particular Rules; we'll set at *Chess* and play a *first Game*; where the *Gambet* shews the Reasons why he who plays first, gives the three *Pawns*, and the King's Bishop.

I. GAME.

WHITE, The King's *Pawn*, moves twice.
BLACK, The same moves twice.
W. The King's Bishop's *Pawn* moves twice.
B. The King's *Pawn* takes the white *Pawn*.
W. The King's Knight in the King's Bishop's 3d Square.

B. The King's Bishop in his King's 2d Square.
W. The King's Bishop in his Queen's Bishop's 4th Square.
B. King's Bishop gives a Check in the white King's Rook's 4th Square.
W. The King's Knight's *Pawn* covers.
B. The *Pawn* takes it.
W. The King castles.
B. The *Pawn* takes the white *Pawn*, and gives a Check.
W. The King moves in his Rook's Place.
B. The Queen's *Pawn* moves once.
W. The King's Bishop takes the Bishop's *Pawn* of the black King's Bishop, and gives a Check.
B. The King takes the white Bishop.
W. The Knight gives a Check in the black King's 4th Square.
B. The King moves in his Place.
W. The Queen gives a Check in the black King's Rook's 4th Square.
B. The King's Knight's *Pawn* covers.
W. The King's Knight takes it.
B. The King's Rook's *Pawn* takes that Knight.
W. The Queen takes that *Pawn* and gives a Check.
B. The King moves in his 2d Square.
W. The Queen gives a CHECK-MATE in the black King's Bishop's 2d Place: Which puts an End to this first Game.

The Second GAME, where the white King's *Pawn* begins again, shews the *Gambet's* Defence, which gives 3 *Pawns* and a Bishop; and is play'd thus,

II. GAME.

WHITE, The King's *Pawn* moves twice.
BLACK, The same moves twice.
W. The King's Bishop's *Pawn* moves twice.
B. The King's *Pawn* takes that white *Pawn*.
W. The King's Knight in his King's Bishop's 3d Square.
B. The King's Bishop in his King's 2d Square.
W. The Queen's Bishop in his Queen's Bishop's 4th Square.
B. The King's Bishop gives a Check in the white King's Rook's 4th Square.
W. The King's Knight's *Pawn* covers.
B. The *Pawn* takes it.
W. The King castles.
B. The *Pawn* takes the white *Pawn*, and gives a Check.
W. The King moves in his Rook's Place.
B. The Queen's *Pawn* moves once.
W. The King's Bishop takes the black King's Bishop's *Pawn*, and gives a Check.
B. The King takes it.
W. The King's Knight gives a Check in the black King's 4th Square.
B. The King in his Place.
W. The Queen gives a Check in the black King's Rook's 4th Square.
B. The King's Knight's *Pawn* covers it.
W. The King's Knight takes that *Pawn*.
B. The Rook's *Pawn* takes the Knight.
W. The Queen takes the black King's Rook.
B. The King in his Queen's 2d Square.
W. The King's Rook gives a Check in the black King's Bishop's 2d Square.
B. The King in his Queen's 2d Square.
W. The King's Rook gives a Check in the black King's Bishop's 2d Square.
B. The King in the Queen's Bishop's 3d Square.
W. The Rook in the black King's Knight's 2d Square.
B. The Queen in her King's Knight's 4th Square; and the Black wins.

The Third GAME shews the Defence of the three *Pawns Gambet* at the 14th Move: Thus,

III. GAME.

III. GAME.

WHITE, The King's Pawn moves twice.
 BLACK, The same moves twice.
 W. The King's Bishop's Pawn moves twice.
 B. The King's Pawn takes it.
 W. The King's Knight in his King's Bishop 3d Square.
 B. The King's Bishop in his King's 2d Square.
 W. The King's Bishop in his Queen's Bishop 4th Square.
 B. The King's Bishop gives a Check in the white King's Rook's 4th Square.
 W. The King's Knight's Pawn covers it.
 B. The Pawn takes it.
 W. The King castles.
 . The Pawn takes the white Pawn, and gives a Check.
 W. The King in his Rook's Place.
 B. The King's Bishop in his 3d Square.
 W. The King's Pawn moves once.
 B. The Queen's Pawn moves twice.
 W. The King's Pawn takes the black Bishop.
 B. The King's Knight takes the white Pawn.
 W. The King's Bishop in the Queen's Knight's 3d Square.
 B. The King castles.
 W. The Queen's Pawn moves twice.
 B. The King's Rook's Pawn moves once. And the Players may finish the Game.

Note, That if the three Pawns Gambet gives you Check with his King's Bishop, you must take it; and keep your own to the 14th Move, to prevent his Designs, in which you ought to oppose him every Move.

The *Fourth* GAME, is the opening for the three Pawns Gambet, which Defence begins at the 14th Move; and is conducted in the following Manner:

IV. GAME.

WHITE, The King's Pawn moves twice.
 BLACK, The same moves twice.
 W. The King's Bishop's Pawn, moves twice.
 B. The King's Pawn takes it.
 W. The King's Knight in his King's Bishop's 3d square.
 B. The King's Bishop in his King's 2d Square.
 W. The King's Bishop in his Queen's Bishop 4th Square.
 B. The King's Bishop gives a Check in the white King's Rook 4th Square.
 W. The King's Knight's Pawn covers it.
 B. The Pawn takes it.
 W. The King castles.
 B. The Pawn takes the white Pawn, and gives a Check.
 W. The King in his Rook's Place.
 B. The King's Bishop in his third Square.
 W. The Queen's Pawn moves twice.
 B. The Queen's Pawn moves once.
 W. The Queen's Knight in her Bishop's 3d Square.
 B. The Queen's Bishop in his King's 3d Square.
 W. The King's Bishop in his Queen's 3d Square.
 B. The Queen's Knight in his Queen's 2d Square.
 W. The Queen's Bishop in his King's Bishop 4th Square.
 B. The Queen's Bishop in the white King's Knight's 4th Square.
 W. The Queen's Knight in his King's 2d Square.
 B. The Queen's Bishop takes the white Knight, and gives a Check.
 W. The Rook retakes it.
 B. The Bishop in his King's Knight's 4th Square.
 W. The Queen's Bishop takes the Pawn near his King.
 B. The King's Knight in his King's 2d Square.
 W. The Queen's Bishop's Pawn moves twice.
 B. The King's Knight in his 3d Square. And those that Play may finish the Game.

The *Fifth* GAME, is a second Opening for the three Pawns Gambet; which Defence begins at the 14th Move: Thus,

V. GAME.

WHITE, The King's Pawn moves twice.
 BLACK, The same moves twice.
 W. The King's Bishop's Pawn moves twice.
 B. The King's Pawn takes it.
 W. The King's Knight in his King's Bishop 3d Square.
 B. The King's Bishop in his King's 2d Square.
 W. The King's Bishop in his Queen's Bishop 4th Square.
 B. The King's Bishop gives a Check in the white King's Rook's 4th Square.
 W. The King's Knight's Pawn covers it.
 B. The Pawn takes it.
 W. The King castles.
 B. The Pawn takes the white Pawn, and gives a Check.
 W. The King in his Rook's Place.
 B. The King's Bishop in his 3d Square.
 W. The Queen's Pawn moves twice.
 B. The Queen's Pawn moves once.
 W. The Queen's Bishop in his King's Bishop 4th Square.
 B. The Queen's Bishop in his King's 3d Square.
 W. The Queen's Knight in her Rook's 3d Square.
 B. The Queen's Bishop takes the white King's Bishop.
 W. The Queen's Knight takes the black Queen's Bishop.
 B. The Queen's Knight in his Queen's 2d Square.
 W. The Queen's Bishop's Pawn moves once.
 B. The King's Knight's Pawn moves twice.
 W. The Queen's Bishop takes the black Pawn near his King.
 B. The King's Knight's Pawn moves once.
 W. The King's Knight in his Queen's 2d Square.
 B. The King's Rook's Pawn moves twice.
 W. The Queen in her Knight's 3d Square.
 B. The Queen's Knight in his 3d Square.
 W. The Queen's Rook's Pawn moves twice.
 B. The Queen's Pawn moves once.
 W. The Queen's Knight in his King's 3d Square.
 B. The Bishop in his King's Knight 4th Square.
 W. The Queen's Rook in his King's Place.
 B. The King's Knight in his King's 2d Square.
 W. The Queen's Rook's Pawn moves once.
 B. The Queen's Knight in the white Queen's Bishop 4th Square.
 W. The Queen's Knight takes it.
 B. The Pawn takes that Knight.
 W. The Queen takes that black Pawn.
 B. The King castles.
 W. The Bishop takes the black Queen's Bishop's Pawn.
 B. The Queen in her 2d Square.
 W. The Bishop in his King's Rook's 2d Square.
 B. The Queen at her Bishop's 3d Square.
 W. The Queen in her 3d Square.
 B. The King's Knight in his 3d Square.
 W. The Queen's Pawn moves once.
 B. The Queen in her 2d Square.
 W. The King's Pawn moves once.
 B. The Knight in the white King's Rook's 4th Square.
 W. The Queen's Bishop's Pawn moves once.
 B. The Knight in the white King's Bishop's 3d Square. And here the Game may be finished.

The *Sixth* GAME, is a third Opening for the three Pawns Gambet, and begins at the 14th Move; in the following Manner:

VI. GAME.

WHITE, The King's Pawn moves twice.
 BLACK, The same moves twice.
 W. The King's Bishop's Pawn moves twice.
 B. The King's Pawn takes it.

W. The

W. The King's Knight in his King's Bishop 3d Square.

B. The King's Bishop in his King's 2d Square.

W. The King's Bishop in his Queen's Bishop 4th Square.

B. The King's Bishop gives a Check in the white King's Rook's 4th Square.

W. The King's Knight's Pawn covers it.

B. The Pawn takes it.

W. The King castles.

B. The Pawn takes the white Pawn, and gives a Check.

W. The King in his Rook's Place.

B. The King's Bishop in his 3d Square.

W. The Queen's Pawn moves twice.

B. The Queen's Pawn moves once.

W. The Queen's Bishop in his King's Bishop 4th Square.

B. The Queen's Bishop in his King's 3d Square.

W. The Queen's Knight in her Rook's 3d Square.

B. The King's Rook's Pawn moves once.

W. The Queen's Bishop's Pawn moves once.

B. The Queen's Bishop takes the white King's Bishop.

W. The Queen's Knight takes the black Queen's Bishop.

B. The Queen's Knight in his Queen's 2d Square.

W. The King's Pawn moves once.

B. The Queen's Pawn takes it.

W. The Queen's Pawn takes the black Pawn.

B. The Bishop in his King's Knight's 4th Square.

W. The Queen's Bishop takes the Pawn at his King's Rook's 2d Square.

B. The King castles.

W. The Queen's Rook in his Queen's Place.

B. The Queen in her Bishop's Place.

W. The King's Knight takes the black Bishop.

B. The King's Rook's Pawn takes the white Knight.

W. The Knight in his King's 3d Square.

B. The Queen's Knight in her Bishop's 4th Square.

W. The Queen in her Bishop's 2d Square.

B. The Queen in the white King's Rook's 3d Square.

W. The Queen in her King's 2d Square.

B. The Queen's Knight in his King's 3d Square.

W. The King's Rook in his King's Bishop's 3d Square.

B. The Queen in her King's Rook's 2d Square.

W. The Queen in her King's Knight 2d Square.

B. The Queen in the white King's 4th Square.

W. The Queen's Rook in her King's Knight's Place.

B. The King's Knight in his 3d Square.

W. The Knight in the black King's Bishop's 4th Square.

B. The double Pawn moves once.

W. The Queen takes it.

B. The Queen takes the white Queen. And here the Game may be finished.

The Seventh GAME, is a fourth Opening for the three Pawns Gambet.

VII. GAME.

WHITE, The King's Pawn moves twice.

BLACK, The same moves twice.

W. The King's Bishop's Pawn moves twice.

B. The King's Pawn takes it.

W. The King's Knight in his King's Bishop 3d Square.

B. The King's Bishop in his King's 2d Square.

W. The King's Bishop in his Queen's Bishop 4th Square.

B. The King's Bishop gives a Check in the white King's Rook's 4th Square.

W. The King's Knight's Pawn covers it.

B. The Pawn takes it.

W. The King castles.

B. The Pawn takes the white Pawn, and gives a Check.

W. The King in his Rook's Place.

B. The King's Bishop in his 3d Square.

W. The Queen's Pawn moves twice.

B. The Queen's Pawn moves once.

W. The Queen's Bishop in his King's Bishop 4th Square.

B. The Queen's Bishop in his King's 3d Square.

W. The Queen's Knight in her Rook's 3d Square.

B. The Queen's Pawn moves once.

W. The King's Pawn takes that Pawn.

B. The Queen's Bishop takes the white Pawn.

W. The King's Bishop takes that black Queen's Bishop.

B. The Queen takes the white King's Bishop.

W. The Queen's Bishop's Pawn moves twice.

B. The Queen in her 2d Square.

W. The Queen in her Knight's 3d Square.

B. The Queen's Bishop's Pawn moves once.

W. The Queen's Rook gives a Check.

B. The King's Knight covers.

W. The Queen's Bishop in the black King's 4th Square.

B. The King castles.

W. The Bishop takes the black Bishop.

B. The Pawn takes the white Bishop.

W. The Queen in her King's 3d Square.

B. The King's Knight in his 3d Square.

W. The Queen's Knight in her Bishop's 2d Square.

B. The Queen's Knight in her Rook's 3d Square.

W. The Queen's Rook's Pawn moves twice.

B. The Queen's Rook in his King's Place.

W. The Queen in the black King's Rook's 3d Square.

B. The Queen's Rook takes a white Rook.

W. The King's Knight takes that black Rook.

B. The Queen in the white King's Knight's 4th Square.

W. The Queen takes the black Pawn near her King.

B. The King in his Knight's 2d Square.

W. The Queen's Knight in his King's 3d Square.

B. The Queen gives a Check in the white King's 4th Square.

W. The Rook covers.

B. The Rook in his King's Place. And the Game may be finished.

The Eighth GAME, one Pawn's Gambet gives a Knight, and his Queen, to give a Check-Mate, with his Queen's Bishop. Thus:

VIII. GAME.

WHITE, The King's Pawn moves twice.

BLACK, The same moves twice.

W. The King's Bishop's Pawn moves twice.

B. The King's Pawn takes it.

W. The King's Knight in his Bishop's 3d Square.

B. The King's Knight's Pawn moves twice.

W. The King's Bishop in his Queen's Bishop 4th Square.

B. The Queen's Pawn moves once.

W. The Queen's Pawn moves twice.

B. The King's Rook's Pawn moves once.

W. The King's Rook's Pawn moves twice.

B. The King's Bishop in his Knight's 2d Square.

W. The King's Rook's Pawn takes the black Pawn.

B. The King's Rook's Pawn takes the white Pawn.

W. The King's Rook takes the black King's Rook.

B. The King's Bishop takes the white Rook.

W. The King's Knight in the black King's 4th Square.

B. The Queen's Pawn takes the white King's Knight.

W. The Queen in the 4th Square of the black King's Rook.

B. The Queen in her King's Bishop's 3d Square.

W. The Queen's Pawn takes the black Pawn.

B. The Queen in her King's Knight's 2d Square.

W. The Queen's double Pawn moves once.

B. The King's Knight in his Rook's 3d Square.

W. The Queen's Pawn takes the black Pawn and gives a Check.

B. The King in his Bishop's Place.

W. The Queen's Bishop takes the black Pawn in his King's Bishop's 4th Square.

B. The *Queen's Bishop* in the white King's Knight's 4th Square upon the white Queen.

W. The *Queen's Bishop* takes the black Queen's Bishop's Pawn.

B. The *Queen's Bishop* takes the white Queen.

W. The *Queen's Bishop* gives a *Check-mate* at the black Queen's 3d Square.

The *Ninth Game* is a Defence of the same *Gambet*, which gives a Knight and his Queen to give a *CHECK-MATE*.

IX. GAME.

WHITE, The *King's Pawn* moves twice.

BLACK, The *same* moves twice.

W. The *King's Bishop's Pawn* moves twice.

B. The *King's Pawn* takes it.

W. The *King's Knight* in his Bishop's 3d Square.

B. The *King's Knight's Pawn* moves twice.

W. The *King's Bishop* in his Queen's Bishop 4th Square.

B. The *Queen's Pawn* moves once.

W. The *Queen's Pawn* moves twice.

B. The *King's Rook's Pawn* moves once.

W. The *King's Rook's Pawn* moves twice.

B. The *King's Bishop* in his Knight's 2d Square.

W. The *King's Rook's Pawn* takes the black Pawn.

B. The *King's Rook's Pawn* takes the white Pawn.

W. The *King's Rook* takes the black King's Rook.

B. The *King's Bishop* takes the white Rook.

W. The *King's Knight* in the black King's 4th Square.

B. The *Queen's Pawn* takes the white King's Knight.

W. The *Queen* in the black King's Rook's 4th Square.

B. The *Queen* in her King's Bishop 3d Square.

W. The *Queen's Pawn* takes the black Pawn.

B. The *Queen* in her Knight's 2d Square.

W. The *double Pawn* takes the black Pawn, and gives a *Check*.

B. The *King* in his Bishop's Place.

W. The *Queen's Bishop* in his Queen's 2d Square.

B. The *Queen's Knight* in his Queen's 2d Square.

W. The *Queen's Bishop* in his 3d Square.

B. The *Queen's Knight* in his King's 4th Square.

W. The *Queen's Knight* in his Queen's 2d Square.

B. The *Queen's Bishop* in the white King's Knight 4th Square, upon the white Queen.

W. The *Queen* in her King's Rook's 2d Square.

B. The *Rook* in his Queen's Place.

W. The *King's Bishop* in the Queen's Knight's 3d Square.

B. The *Queen's Bishop's Pawn* moves twice.

W. The *Queen's Knight* in his Queen's Bishop's 4th Square.

B. The *King's Knight* in his 3d Square.

W. The *King* in his Bishop's 2d Square.

B. The *Rook* in the white Queen's Place.

W. The *Rook* takes the black Rook.

B. The *Queen's Bishop* takes the white Rook.

W. The *Queen* in her King's Rook's Place.

B. The *Queen's Bishop* in the white King's Knight's 4th Square.

W. The *Knight* in the black Queen's 3d Square.

B. The *King's Knight* in the white King's Rook's 4th Square.

W. The *Knight* in the black King's Place.

B. The *Queen* in her King's Rook's 2d Square.

W. The *Knight* in the black Queen's 3d Square.

B. The *Queen's Knight's Pawn* moves once.

W. The *Queen* in her King's Place.

B. The *King's Knight* takes the white King's Knight's Pawn.

W. The *King* takes the black Knight.

B. The *Queen* gives a *Check* in the white King's Rook's 3d Square.

W. The *King* in his Bishop's 2d Square.

B. The *Queen* gives a *Check* in the white King's Rook's 2d Square.

W. The *King* in his Bishop's Place.

B. The *Queen's Bishop* gives a *Check-Mate* in the white King's Rook's 3d Square.

Next we'll play a *CLOSE GAME*.

X. GAME.

WHITE, The *King's Pawn* moves twice.

BLACK, The *same* moves twice.

W. The *Queen's Bishop's Pawn* moves once.

B. The *Queen's Bishop's Pawn* moves twice.

W. The *King's Bishop* in his Queen's Bishop's 4th Square.

B. The *Queen's Pawn* moves once.

W. The *King's Knight* in his King's 2d Square.

B. The *Queen's Bishop* in her King's 3d Square.

W. The *King's Bishop* takes it.

B. The *King's Bishop's Pawn* takes the white Bishop.

W. The *Queen* in her Knight's 3d Square.

B. The *Queen* in her 2d Square.

W. The *King's Bishop's Pawn* moves twice.

B. The *Queen's Knight* in her Bishop's 3d Square.

W. The *King* castles.

B. The *King's Knight* in his Bishop's 3d Square.

W. The *Queen's Pawn* moves once.

B. The *King's Bishop* in his King's 2d Square.

W. The *Queen's Bishop* in her King's 3d Square.

B. The *King* castles in the Queen's Bishop's Place; and the Game may be finished.

The *Eleventh Game*, is the Opening for the *Close Game*.

XI. GAME.

WHITE, The *King's Pawn* moves twice.

BLACK, The *same* moves twice.

W. The *King's Bishop* in his Queen's Bishop's 4th Square.

B. The *King's Knight's Pawn* moves once.

W. The *Queen's Pawn* moves once.

B. The *King's Bishop* in his Knight's 2d Square.

W. The *Queen's Knight* in her Bishop's 3d Square.

B. The *Queen's Pawn* moves once.

W. The *King's Knight* in his King's 2d Square.

B. The *Queen's Bishop's Pawn* moves once.

W. The *Queen's Bishop* in her King's 3d Square.

B. The *Queen's Bishop* in her King's 3d Square.

W. The *King's Bishop* in his Queen's Knight 3d Square.

B. The *King's Knight* in his Bishop's 3d Square.

W. The *King* castles.

B. The *King* castles.

W. The *King's Bishop's Pawn* moves twice.

B. The *Queen's Bishop* takes the white King's Bishop.

W. The *Queen's Rook's Pawn* takes the black Bishop.

B. The *Queen's Knight* in her Rook's 3d Square. And the Game may be finished.

Another *Close-Game*, that gives no Pawn at the second Move.

XII. GAME.

BLACK, The *King's Pawn* moves twice.

WHITE, The *same* moves twice.

B. The *King's Bishop* in his Queen's Bishop's 4th Square.

W. The *Queen's Bishop's Pawn* moves once.

B. The *Queen's Bishop's Pawn*, moves once.

W. The *Queen's Pawn* moves twice.

B. The *King's Pawn* takes that Pawn.

W. The *Queen's Bishop's Pawn* takes it.

B. The *King's Bishop* in his Queen's Knight 3d Square.

W. The *King's Bishop's Pawn* moves twice.

B. The *King's Knight* in his King's 2d Square.

W. The *Queen's Knight* in her Bishop's 3d Square.

B. The *Queen's Pawn* moves twice.

W. The *King's Pawn* moves once.

B. The *King* castles.

W. The *King's Knight* in his Bishop's 3d Square.

B. The *Queen's Bishop* in the white King's Knight's 4th Square.

W. The

W. The *King's Bishop* in his *King's* 2d Square.
 B. The *King's Bishop's Pawn* moves twice.
 W. The *King* castles.
 B. The *Queen's Knight* in his *Queen's* 2d Square.
 W. The *Queen's Bishop* in her *King's* 3d Square.
 B. The *Queen's Bishop's Pawn* moves once.
 W. The *Queen's Pawn* takes it.
 B. The *Queen's Knight* takes the white *Pawn* in her *Bishop's* 4th Square.
 W. The *Queen's Knight* takes the black *Queen's Pawn*.
 B. The *Queen* takes the white *Queen's Knight*.
 W. The *Queen* takes the black *Queen*.
 B. The *King's Knight* takes the white *Queen*.
 W. The *King's Bishop* in his *Queen's Bishop's* 4th Square.
 B. The *Queen's Rook* in his *Queen's* Place. And the Game may be finished.

The *Thirteenth* GAME, shews the Situation of a concealed Move, in which the white wins by the Moves, though inferior as to the Number of Pieces.

XIII. GAME.

WHITE, The *King* in his *Bishop's* Place.
 A *Bishop* in his *Queen's* Place.
 The *Queen's Knight* in his 3d Square.
 The other *Knight* is his *Queen's Rook's* 4th Square.
 A *Rook* in the black *Queen's Rook's* 3d Square.
 The *Queen* in his black *King's* 3d Square.
 A *Pawn* in the *King's Knight's* 2d Square.
 A *Pawn* in the *King's Rook's* 3d Square.
 A *Pawn* in the *King's Bishop's* 4th Square.
 A *Pawn* in the white *Queen's* 4th Square.
 A *Pawn* in the black *King's* 4th Square.

Situation of the BLACK for the same.

BLACK, The *King* in his *Queen's* Place.
 A *Rook* in his *King's* Place.
 A *Rook* in his *Queen's Bishop's* Place.
 A *Knight* in his *King's Bishop* 2d Square.
 A *Bishop* in the *Queen's Rook's* Place.
 A *Bishop* in the *Queen's Bishop* 2d Square.
 A *Pawn* in the *King's* 2d Square.
 A *Pawn* in the *Queen's* 3d Square.
 A *Pawn* in the *King's Bishop's* 4th Square.
 A *Pawn* in the white *King's Rook's* 4th Square.
 A *Pawn* in the white *King's Knight's* 3d Square.

BLACK, The *Queen* in the white *King's* 3d Square, and the White must play first.

WHITE, The *Queen* gives a Check in the black *Queen's* 2d Square.

BLACK, The *King* takes the *Queen*.

W. A *Knight* gives a Check in the black *Queen's Bishop's* 4th Square.

B. The *King* in his *Queen's* Place.

W. The same *Knight* gives a Check in the black *King's* 3d Square.

B. The *King* in his *Queen's* 2d Square.

W. The other *Knight* gives a Check in the black *Queen's Bishop's* 4th Square.

B. The *Queen's Pawn* takes the *Knight*.

W. The *Bishop* gives a Check in his *Queen's Rook's* 4th Square.

B. The black *Bishop* covers.

W. The *Bishop* takes it, and gives a Check.

B. The *King* takes the white *Knight*.

W. The *Queen's Pawn* gives a *Check-mate*, and it would be the same if the black *Pawn* takes the *Knight* that gives the first Check.

The *fourteenth* GAME gives the Situation of the latter End of a Game.

XIV. GAME.

WHITE, The *King* in the black *King's Bishop's* Place.

WHITE, The *Queen's Rook* in his *Queen's* Place.

The *King's Rook* in his *King's Bishop's* Place.
 The *King's Knight* in his *King's Bishop's* 3d Square.

The *King's Pawn* in his *King's* 4th Square.

BLACK, The *King* in his 3d Square.

The *King's Pawn* in his *King's* 4th Square.

The *Queen* in the white *Queen's Rook's* 4th Square.

The *Queen's Rook* in his *Queen's Knight's* 2d Square.

The *Queen's Knight* in her *Bishop's* 3d Square.

The *King's Knight* in his *King's Rook's* 3d Square.

The *King's Rook* in his *King's Knight's* 3d Square.

The *Queen's Rook's Pawn* in his *Rook's* Square.

The *Queen's Knight's Pawn* in his *Queen's Knight's* 3d Square.

And the *White* playing 3 Moves will give *Check-mate* to the black *King*.

WHITE, The *King's Knight* gives a Check in the white *King's Knight's* 4th Square.

BLACK, The *Rook* takes the white *Knight*.

W. The *King's Rook* gives a Check in the black *King's Bishop's* 3d Square.

B. The *King* takes the white *Rook*.

W. The *Queen's Rook* gives a *Check-Mate* in the black *Queen's* 3d Square.

The *Fifteenth* GAME, is the Situation of a concealed Move, and the *Knight* gives *MATE*.

XV. GAME.

WHITE, The *King* in his *Knight's* Place.
 The *Queen* in the black *Queen's Rook's* Place.
 The *Queen's Rook* in his Place.
 The *King's Rook* in his *King's* Place.
 A *Knight* in his *Queen's* 2d Square.
 The *King's Rook's Pawn* in his Place.
 The *King's Knight's Pawn* in his Place.
 The *Queen's Knight's Pawn* in his Place.
 BLACK, The *King* in his *Knight's* Place.
 The *Queen* in her *King's* 2d Square.
 A *Knight* in the white *King's Knight's* 4th Square.
 The *King's Bishop* in his Place.
 The *King's Rook's Pawn* in his Place.
 The *Queen's Knight's Pawn* in his 3d Square.

The *Black* to play.

BLACK, The *Queen* gives a Check in her *Bishop's* 4th Square.

WHITE, The *King* in his *Rook's* Place.

B. The *King* gives a Check.

W. The *King* in his *Knight's* Place.

B. The *Knight* gives a Check in the white *King's Rook's* 3d Square, and the Check is double by the *Queen*.

WHITE, The *King* in his *Rook's* Place.

BLACK, The *Queen* gives a Check in the white *King's Knight's* 4th Place.

W. The *Rook* takes the black *Queen*.

B. The *Knight* gives a *Check-Mate* in the white *King's Bishop's* 2d Square.

Situation to give a *Check-Mate*, with a *Knight* and a *Bishop*, in which the *Bishop* must be of the same Colour as the Corner of the Chequer, to carry the *King* alone in it.

XVI. GAME.

WHITE, The *King* in his *Rook's* Place.

BLACK, The *King* in the white *King's Bishop's* 3d Square.

The *Knight* in the white *King's Rook's* 3d Square.

The *Bishop* in the white *King's Knight's* 3d Square.

And the *Black* to play.

BLACK, The *Knight* gives a Check in the white *King's Bishop's* 2d Square.

WHITE, The *King* in his *Knight's* Place.

B. The *Bishop* in the white *King Bishop's* 4th Square.

W. The

W. The *King* in his Bishop's Place.
 B. The *Bishop* in the white King's Rook's 2d Square.
 W. The *King* in his Place.
 B. The *Knight* in the white King's 4th Square.
 W. The *King* in his Bishop's Place.
 B. The *Knight* gives a Check in the white Queen's 2d Square.
 W. The *King* in his Place.
 B. The *King* in the white King's 3d Square.
 W. The *King* in his Queen's Place.
 B. The *King* in the white Queen's 3d Square.
 W. The *King* in his Place.
 B. The *Bishop* gives a Check.
 W. The *King* in his Queen's Place.
 B. The *Bishop* in the white King's Bishop's 2d Square.
 W. The *King* in his Queen's Bishop's Place.
 B. The *Knight* in the white Queen's Bishop's 4th Square.
 W. The *King* in his Queen's Place.
 B. The *Knight* gives a Check in the white Queen's Knight 2d Square.
 W. The *King* in his Bishop's Place.
 B. The *King* in the white Bishop's 3d Square.
 W. The *King* in the Knight's Place.
 B. The *King* in the white Knight's 3d Square.
 W. The *King* in the Bishop's Place.
 B. The *Bishop* gives a Check in the white King's 3d Square.
 W. The *King* in the Knight's Place.
 B. The *Bishop* in the white Queen's 2d Square.
 W. The *King* in his Queen's Rook's Place.
 B. The *Knight* in the Bishop's 4th Square.
 W. The *King* in his Knight's Place.
 B. The *Knight* gives a Check in the Rook's 3d Square.
 W. The *King* in the Rook's Place.
 B. The *Knight* gives a Check in the Rook's 3d Square.
 W. The *King* in the Rook's Place.
 B. The *Bishop* gives a *Check-mate*. This Game varies according to the Situation of the King alone.

Situation of the Game called PATT.

XVII. GAME.

WHITE, The *King* in the black Queen's Knight's Place.
 The *Queen* in her King's Bishop's Place.
 A *Rook* in the black Queen's Knight's 4th Square.
 The King's *Knight* in his 3d Square.
 The King's Rook's *Pawn* in his Place.
 BLACK, The *King* in the white King's Rook's 4th Square.
 The *Queen* in her King's Knight's 2d Square.
 A *Pawn* in the white King's Rook's 3d Square.
 A *Pawn* in the white King's Knight's 4th Square.

The *Black* to play.

BLACK, The *Queen* gives a Check in her Bishop's 2d Square.

WHITE, The *King* in the black Queen's Rook's Place.

B. The *Queen* gives a Check in her Rook's 2d Square.

W. The *King* takes the black *Queen*. And the white loses the Game, the black King being PATT, and a Rook often makes a Drawing Game.

A Game won by the Patt, if the contrary King will hinder the Pawn to go to a Queen.

XVIII. GAME.

WHITE, The *King* in his Bishop's 4th Square.
 BLACK, The *King* in the white King's Rook's 4th Square.

The King's Rook's *Pawn* in his Place.

And the *Black* to play.

BLACK, The *Pawn* moves twice.

WHITE, The *King* in his Bishop's 3d Square.
 B. The *King* in the white Rook's 3d Square.
 W. The *King* in his Bishop's 2d Square.
 B. The *King* in the white Rook's 2d Square.
 W. The *King* in his Bishop's 3d Square.
 B. The *Pawn* moves once.
 W. The *King* in his Bishop's 2d Square.
 B. The *King* in the white Rook's Place.
 W. The *King* in his Bishop's Place.
 B. The *Pawn* moves once.
 W. The *King* in his Bishop's 2d Square.
 B. The *Pawn* moves once.
 W. The *King* where he pleases, and the Black loses.

A Game in which a Knight gives a Check-Mate in few Moves by Force.

XIX. GAME.

BLACK, The King's *Knight's Pawn* in his Place.
 The King's Rook's *Pawn* in the white King's Rook's 3d Square.
 BLACK, The *King* in the white King's Rook's 2d Square.
 WHITE, The *King* in his Bishop's 2d Square.
 A *Knight* in the black King's Knight's Place.

And the *Black* is to play.

BLACK, The *Knight's Pawn* moves twice.
 WHITE, The *Knight* in the black King's Bishop's 3d Square.
 B. The *King* in the white Rook's Place.
 W. The *Knight* in his King's Knight's 4th Square.
 B. The Rook's *Pawn* moves once.
 W. The *Knight* in his King's Bishop's Place.
 B. The *Knight's Pawn* gives a Check.
 W. The *Knight* takes that *Pawn*, and gives a CHECK-MATE.

Situation of a concealed Move.

WHITE, The *King* in his *Knight's* Place.
 The King's *Rook* in his Place.
 The *Queen* in the 3d Square of the black Queen's Bishop.
 A *Bishop* in the 4th Square of the black Queen's Knight.
 A *Knight* in the black King's Knight's 3d Square.
 A *Knight* in his King's Bishop's 2d Square.

WHITE, A *Pawn* in the black Queen's Rook's Square.
 A *Pawn* in the white Queen's Bishop's 4th Square.
 A *Pawn* in his King's Knight's 3d Square.
 The King's Rook's *Pawn* in his Place.

BLACK, The *King* in his Queen's Bishop's Place.
 The *Queen* in her King's Knight's 4th Square.
 A *Rook* in the white King's 2d Square.
 The Queen's Bishop's *Pawn* in his Place.
 The Queen's Knight's *Pawn* moves once.
 The King's Bishop's *Pawn* moves twice.
 The King's *Pawn* in the white King's 4th Square.

The *Black* to play.

BLACK, The *Rook* gives a Check.
 WHITE, The *King* in his Knight's 2d Square.
 B. The *Knight* gives Check in the white King's 3d Square.
 W. The *King* in his Rook's 3d Square.
 B. The *Queen* gives Check in her King's Rook's 4th Square.
 W. The *Knight* covers.
 B. The *Queen* gives Check in the white King's Knight's 4th Square.
 W. The *Knight* takes the black *Queen*.
 B. The *Pawn* takes the white *Knight*, and gives Mate.

Situation of the second concealed Move.

WHITE, The *King* in his *Knight's* Place.
 The *Queen* in her Rook's 4th Square.
 A *Rook* in his King's Place.
 A *Rook* in his Queen's 2d Square.

†

A *Knight*

A *Knight* in the black Queen's 4th Square.
 A *Bishop* in his King's Bishop's 4th Square.
 A *Pawn* in the black Queen's Bishop's 4th Square.
 The King's Bishop's *Pawn* in his Place.
 The King's Knight's *Pawn* moves once.
 BLACK, The King in his Queen's Knight's Place.
 The Queen in the white King's Rook's 3d Square.
 A *Rook* in the Queen's Bishop's Place.
 The King's *Rook* in his 2d Square.
 The King's *Knight* in his 2d Square.
 The Queen's *Knight* in her Bishop's 2d Square.
 A *Bishop* in the white King's Bishop's 3d Square.
 A *Pawn* in the white King's 4th Square.
 The Queen's Rook's *Pawn* in his Place.
 The Queen's Knight's *Pawn* in his Place.

And the *White* to play.

WHITE, The *Bishop* takes the black Knight, and gives Check.

BLACK, The Queen's *Rook* takes the said Knight.

W. The Queen takes the black Queen's Rook's Pawn and gives Check.

B. The King takes the white Queen.

W. The *Rook* that stands in his King's Place gives Check.

B. The King in his Queen's Knight's Place.

W. The same *Rook* gives Check in the black Queen's Rook's Place.

B. The King takes it.

W. The *Knight* gives Check in the black Queen's Knight's 3d Square.

B. The King in his Queen's Knight's Place.

W. The *Rook* gives Check in the black Queen's Place.

B. The King in his Queen's Rook's 2d Square.

W. The *Rook* gives *Mate* in the black Queen's Rook's Place.

Note, That to find out expeditiously the Situation of these Sort of Games, you must put both Kings in their Places, and change them where it is necessary, after the white and black Men are posted.

CHES, is certainly a most antient and universal Game: The common Opinion is, that it was invented by *Palamedes*, at the Siege of *Troy*, to divert tedious Evenings during that long Siege. Others attribute the Invention to *Diomedes*, who lived in the Time of *Alexander*: The Romance of the *Rose* ascribes it to one *Attalus*; but the Truth is, the Game is so very antient, there is no tracing its Author.

In *China* it makes a considerable Part of the Education of their Maids, and seems to take the Place of Dancing among us. In *Spain* whole Cities challenge each other at *Chess*.

Donatus, on *Terence's Eunuch*, observes that *Pyrrhus*, the most knowing and expert Prince of his Age, ranging a Battle, made use of the *Men* at *Chess* to form his Designs; and to shew the Secrets thereof to others. *Vopiscus* in his Life of *Proclus*, informs us, that one of the *Roman* Emperors had the Title *Augustus* given him, because of his gaining ten Games at *Chess* successively. *Tamerlane* is recorded as a very expert Gamester at *Chess*.

John of *Salisbury* relates, that in a Battle between the *French* and *English* in 1117, an *English* Knight seizing the Bridle of *Louis le Gros*, King of *France*, and crying to his Comrades, *The King is taken*, *Louis* struck him to the Ground with his Sword, saying, *Ne sais tu pas qu'aux Echecs, on ne prend pas le Roy?* i. e. Dost thou not know, that at *Chess* the King is never taken? The Reason is, that when the King is reduced to such a pass that there is no Way for him to escape, the Game ends, without exposing the Royal Piece to further Affront.

Cardinal *Cajetan*, and other Casuists, rank *Chess* in the Number of prohibited Games, as requiring too much Application: And *Montaign* blames it as too serious for a Game.

BOWLING, is a Game of Recreation, Exercise, and Address, which consists chiefly in having a kind of

Compass in the Eye, to measure well the Distance between the Place the Gamester lets fall his Bowl at, and the *Jack*, that it may neither fall short of it, nor run too far from it.

Besides this general Rule, there are some particular ones; the most essential whereof is to chuse well one's Bowl, according to the Situation or Disposition of the Alley; for if it be a close one, a flat Bowl is best; round-byassed Bowls for open Grounds of Advantage, and Bowls round as a Ball for green Swarths that are plain and level.

In *Britanny*, my Country, we have none of those green Swarths; but only Alleys about ninety Feet long and ten or twelve broad, open on both Sides and at both Ends, and covered a-top. The Alley is very level and smooth; and covered, in lieu of Gravel, with Sea-Sand. The Bowls used in those Alleys are very round, with a Hole on one Side filled up with Lead, which is called the *Fort* or *Bias* of the Bowl, which *Fort* carries the Bowl on that Side the Player turns it, and designs his Bowl should go. The *Jack* is also a round Bowl, with such a Fort; and he who plays first throws it as far as he pleases, and where he pleases, in the Alley. We imagine that he who lets fall his Bowl at his very Feet without extending his Arms is the best Gamester.

There, as well as here, we screw our Body into all Forms, cajoling the Bowl while it rolls, to engage it to approach the *Jack* as near as possible, and scolding, and even insulting it in the most scurrilous Manner, if it stops too soon, or runs too fast.

CUDGEL-PLAYING, is a Game of Exercise and Address, attended very often with broken Pates, bloody Noses, and other Trifles of that Kind.

In my Country, especially that Part of the Province called the *Low-Brittanny*, *Cudgel-Playing* is very much in Fashion; and the Peasants learn it with the same Assiduity, the Nobility do *Fencing*. They have a *Cudgel* of about three Feet long, which they use with an extraordinary Dexterity; the whole Secret of this Game is to strike one's Adversary, and to receive little or no Blows from him. With that *Cudgel* they cover their whole Body, and you find it every where to oppose a Blow over the Head; before, behind, &c. I have seen a Master in that Art fight against three Dragoons armed with Swords, disarm one of them, and with his Sword put the other two to flight.

WRESTLING, is a kind of Combat, or Engagement between two Persons unarmed, Body to Body, to prove their Strength and Dexterity; and try which can throw his Opponent to the Ground.

This kind of Exercise is also much practised in *Britanny*; the *Britons* undress themselves to the Skin, hiding only what Modesty forbids exposing to View, and sometimes not even that. The Law of *Wrestling* among them, is to give no Blows at all, nor lay hold of the Hairs, but all must be done by main Strength. If he that throws his Opponent to the Ground falls upon him, or even stoops in throwing him, the Throw is not fair; for to be such, the Conqueror must send his Opponent to bite the Dust, and he stand upright. The Conqueror, besides the publick Applauses, is often entitled to some Reward, as to a Sum of Money, a Hat, or some other Things, at the Discretion of those who encourage the Wrestling-Match, who is often the Lord of the Manor.

Wrestling, *Palæstra*, is an Exercise of very great Antiquity and Fame. It was in Use in the heroick Age; witness *Hercules* who wrestled with *Antæus*. It continued a long Time in the highest Repute; and had very considerable Rewards and Honours assigned it at the Olympick Games. It was the Custom for the *Athletæ* to anoint their Bodies with Oil to give the less Hold to their Antagonist. *Abiancourt* observes, that *Lycurgus* ordained the *Spartan* Maids to wrestle in Publick quite naked, to break them of their too much Delicacy and Niceness, to make them appear more robust, and to familiarise the People, &c. to such Nudities.

JUSTS and TURNAMENTS, were the Games of Exercise of the Antients.

JUST, was a sportive kind of Combat on Horseback, Man against Man with Lances.

Antiently *Justs* and *Turnaments* made a Part of the Entertainment at all solemn Feasts and Rejoicings. The *Spaniards* borrowed these Exercises from the *Moors*, and called them *Juego de Cannas*, Reed or Cane-Play. Some take them to be the same with *Ludus Trojanus*, antiently practised by the Youth of *Rome*. The *Turks* use them still, and call them *lancing the Gerid*.

The Difference between *Justs* and *Turnaments* consists in this, that the latter is the *Genus*, of which the former is only a *Species*. *Turnaments* included all Kinds of military Sports and Engagements, made out of Gallantry and Diversion. *Justs* were those particular Combats, where the Parties were near each other, and engaged with Lance and Sword: And that the *Turnament* was frequently performed by a Number of Cavaliers, who fought in a Body. The *Just*, was a single Combat of one Man against another. Though the *Justs* were usually made in *Turnaments*, after a general Rencontre of all the Cavaliers, yet they were sometimes singly, and independant of any *Turnament*. He who appeared for the first Time at a *Just*, forfeited his Helm or Casque, unless he had forfeited before at a *Turnament*.

Turnament or TOURNAMENT, was a martial Sport or Exercise, which the antient Cavaliers used to perform to shew their Bravery and Address.

The first *Turnaments* were only Courses on Horseback, wherein the Cavaliers tilted at each other with Canes, in manner of Lances; and were distinguished from *Justs*, which were Courses or Careers accompanied with Attacks and Combats with blunted Lances and Swords.

Others say it was a *Turnament*, when there was only one *Quadril* or Troop; and that where there were several to encounter each other, it was a *Just*. But it is certain the two became confounded together in Process of Time; at least we find them so in Authors.

The Prince who published the *Turnament*, used to send a King at Arms with a safe Conduct, and a Sword, to all the Princes, Knights, &c. signifying that he intended a *Turnament*, and a clashing of Swords, in the Presence of Ladies and Damsels: Which was the usual Formula of Invitation.

They first engaged Man against Man, then Troop against Troop; and after the Combat the Judges allotted the Prize to the best Cavalier, and the best Striker of Swords; who was accordingly conducted in Pomp to the Lady of the *Turnament*; where, after thanking her very reverently, he saluted her, and likewise her two Maids.

These *Turnaments* made the principal Diversion of the 13th and 14th Centuries. *Alunster* says, it was *Henry the Fourth*, Duke of *Saxony*, and afterwards Emperor, that first introduc'd them; but it appears, from the Chronicle of *Tours*, that the first Inventor of this famous Sport, was one *Grossy* Lord of *Priuli*, in *France*, about the Year 1066.

From *France* they passed into *England* and *Germany*. The *Historia Byzantina* tells us, that the *Greeks* and *Latins* borrow'd the Use thereof from the *Franks*; and we find Mention made of them, in *Cantacuzen*, *Beffarion*, and others of the late *Greek* Authors.

Budens derives the Word from *Trojana agmina*; others from *Trojamentum*, quasi *ludus Troje*. *Menage* deduces it from the Latin *Tornensis*, or the French *Tourner*, in regard the Combatants turned and twisted this Way and that. *M. Paris* calls them in Latin *Hoplitalia*; *Meubigenfis Meditationes militares*; others *Gladiatorie*, others *Decurfiones ludivæ*, &c.

Pope *Eugenius II.* excommunicated those who went to *Turnaments*, and forbade them Burial in holy Ground. King *Henry II.* of *France* died (as was observed in the Article *Chronology*) of a Wound receiv'd at a

Turnament. One *Chiaou*, who had assisted at a *Turnament*, under *Charles VIII.* of *France*, said very happily, *If it be in Earnest, it is too little; if in Jest, too much.*

It is to the Exercise of *Turnaments* that we owe the first Use of Armories; of which the Name *Blazonry*, the Form of the *Escutcheons*, the Colours, principal Figures, the *Mantlings*, *Labels*, *Supporters*, &c. are undeniable Evidences.

In *Germany* it was antiently a Custom to hold a solemn *Turnament* every three Years, to serve as a Proof of Nobility: For the Gentleman who had assisted at two, was sufficiently blazoned and published; i. e. he was acknowledged noble, and bore two Trumpets by way of Crest on his *Turnament* Cask. Those who had not been in any *Turnaments*, had no Arms, though they were Gentlemen.

Thus far for Games of Exercise, of Address, &c. The modern Ones of Chance are *Cards* and *Dice*, &c. and the principal Games of Cards are *Ombre*, *Quadrille*, *Quinquille*, *Picquet*, *Basset*, *Faro*, &c.

OMBRE, is a celebrated Court-Game at Cards; play'd by two, by three, or by five Persons; but generally by three.

The Game of *Ombre* is borrowed from the *Spaniards*; and requires all the Phlegm and Gravity of that Nation in the Playing. The Name signifies as much as the *Game of Man*; *Ombre*, or *Hombre*, in *Spanish*, signifying Man; in Allusion to the Thought and Attention required therein.

In *Ombre by Three* (which is the most ordinary Way of playing it) nine Cards are dealt to each Party; the whole *Ombre* Pack being only 40; by reason the Eights, Nines, and Tens, are thrown aside. The two black Aces are always Trumps, in both Colours, either red or black: The Ace of Spade (called *Spadille*) being always the first and best Trump; and the Ace of Clubs (called *Basto*) always the third Trump. The second Trump in Red, is the seven of Diamonds, when *Diamond* is Trump, or of Hearts, when Heart is Trump: And in black the Duce of Spade, when Spade is Trump; or of Clubs, when Clubs is Trump. This second Trump, in both Colours, is call'd *Manille*; but the seven in red, or the two in black, is no longer of such a Value; but while the Suit they are of is Trump, otherwise they return to their natural inferior Rank.

The red Aces, when we play in red, change likewise their Place. Thus when we play in Hearts, the Ace of Hearts, takes Place of the King, and is the fourth Trump; as likewise does the Ace of Diamonds, when we play in Diamonds; and are call'd *Punto's*.

For the better understanding the Nature of the Trump, here follows a Table, where they are placed in their Order.

RED.	BLACK.
<i>Spadille</i> , Ace of Spade	<i>Spadille</i> , Ace of Spade
<i>Manille</i> , the Seven	<i>Manille</i> , the Duce
<i>Basto</i> , Ace of Clubs	<i>Basto</i> , Ace of Clubs
<i>Punto</i> , the Red Ace	King
King	Queen
Queen	Knave
Knave	Seven
Duce	Six
Three	Five
Four	Four
Five	Three.
Six.	

Thus you see there are 12 Trumps in Red, and but 11 in Black. But when the red, or black Suit, is not Trump, the Cards observe the following Order:

RED.	BLACK.
King	King
Queen	Queen
Knave	Knave
Ace	Seven
Duce	Six
	Three

Three
Four
Five
Six
Seven

Five
Four
Three
Duce

Note, That the three first, or principal Trumps, are called *Matadores*; which have this Privilege, that they are not obliged to attend an inferior Trump when it leads; but for Want of another small Trump, the Person may renounce Trump, and play another Card; though an inferior *Matadore* is obliged to obey a superior one, *ex. gr.* if your Antagonist plays *Spadille*, and you have no other Trump but *Matadores*, you are obliged to play one of those *Matadores*; but if your Antagonist plays *Basto*, and you have but *Spadille* in your Hand, without any other Trump, you may renounce every time, and keep *Spadille* as long as you think fit; likewise if your Antagonist plays *Basto*, and you have but *Manille*; you are not obliged to play that *Manille*, but renounce every time, if you please, unless he plays *Spadille*, to force it out of your Hand, and thus of all *Matadores*; but you have not the same Privilege to keep the small Trumps; for you are obliged to play them when called for, and if you renounce you are beasted. Another Privilege of *Matadores* is, that whoever has them, shall be paid a Counter for each, *i. e.* if they follow one another, *viz.* *Spadille*, *Manille*, *Basto*, &c. for when there is an Interruption, *viz.* *Spadille*, *Basto*, without *Manille*, or *Manille Punto*, without *Basto*, no *Matadores* are to be paid for. None but the *Ombre* can be paid for *Matadores*; and if he loses the Game with three *Matadores* in his Hand, he is to pay three Counters to each of his Antagonists.

Note also, That those Trumps which immediately follow, *Spadille*, *Manille* and *Basto*, when they happen to meet in the Hands of the *Ombre*, usurp the Name of *Matadores*, and must be paid as such. For Example, if I have *Spadille*, *Manille*, *Basto*, *Punto*, *King*, *Queen* and *Knave*, I have seven *Matadores*, and must receive seven a-piece from my two Opposites; likewise, if in Black I have *Spadille*, *Manille*, *Basto*, *King*, *Queen* and *Knave*, I have six *Matadores*.

Having thus informed ourselves of the Value of the Cards at *Ombre*, we must know next that the Trump is not made at *Ombre*, by turning up a Card, as at other Games; but after the Cards are dealt (the Dealing beginning in this Game at the right hand) every one examines his Game in his Turn, the eldest Hand being to speak first, and declare if he either plays or passes; if he passes, the next to him has the same Liberty of playing or passing, and thus the third; and he who plays declares the Trump.

For Example, we'll suppose that you are the eldest Hand, and that you have *Spadille* the Ace, and *Manille* the Duce of Spades, *Basto* the Ace of Clubs, the seven, and the three of Spades; you will find upon Examination, that you have three *Matadores*, and two Trumps, which is a very good Game; you must ask the others if they play, that is understood, if they play without *taking in* (for if any one of them do, tho' you are the eldest Hand, you cannot hinder him, unless you offer to play *Sans Pendre* yourself, of which, being the eldest Hand you have the Preference.) If they answer *No*, then you are to say Spades are Trumps, and make your Discard accordingly, and in that Manner the Trump is made.

Note, That the Person who plays must always name the Trump before he looks at the Cards he takes in, for if he should happen to turn them up, tho' he should not see them before the Trump is made, then either of the other two may name it; and he shall be obliged to play in that Suit, let it be what it will. If the *Ombre* should name two Colours at the same Time, then the Person who sits at his right Hand, shall chuse which of those two Colours he

thinks fit, and the *Ombre* shall be obliged to play in that Suit. In this Case the *Ombre* shall have the Liberty to look at his Discard, and if he has put out any of that Suit which is nam'd for him, he may take them in again, provided the Cards he took in, are not join'd to the rest of his Game; if so he has not this Liberty.

Note also, That it is necessary to be very exact in naming the Trump. For Example, if a Person who intends to play in Clubs, should shew three Cards that he puts out, a Heart, a Spade, and a Diamond, and say you may know my Trumps by what I put out, this will not be sufficient, and the others may name it as if he had not spoke at all: For sometimes, in that Case, a Man might put out a Trump to deceive others. If after the *Ombre* has look'd at the Cards he takes in, recollects that he did not name the Trump, and the other two should forget to speak before him, he may name it then without incurring any Penalty.

The Person who undertakes the Game, is called *OMBRE*.

Before the Game at *Ombre* begins, a certain Number of Fishes and Counters must be provided, suppose nine Fishes, and twenty Counters to each.

Note, That a *Fish* is a Counter, made in the Shape of a *Fish*, to distinguish it from the other Counters, and is generally made to be worth ten Counters; the Price thereof must be according to the Sum you intend to play for, as a Crown, half a Crown, a Shilling or Six-pence. Before the Deal begins, every Player must lay down a Fish a-piece.

After the Fishes are laid down, a Person taking the Pack, turns up a Card in the Middle of the Table, and afterwards gives a Card a-piece round, and whoever has the highest Card of that Suit which lies in the Middle, is the first Dealer. Another Way is, by giving Cards round, and whoever has the first black Ace, deals first.

The Dealer thus chosen, shuffles the Cards, and lays them down to be cut by the Person on his left Hand, and then deals, beginning, as we have already observed, by the Person on his right Hand, giving 3 and 3 round, till he has dealt 9 a-piece; and if he should by Mistake, or otherwise, give the Cards in another Manner, or give more, or fewer Cards, he is oblig'd to deal again. When he has dealt, there will be 13 Cards left, which he is to lay down at his right Hand.

The Cards thus dealt, the eldest Hand speaks first, as we have observ'd, and if all three should *pass* (which often happens) every one is to lay down a single Counter, and the next Person deals; which Counters, are not to be mix'd together, but every one lays his own just before him, to avoid Dispute, if there was any wanting, by discovering presently who has omitted to lay down.

Note, That if in dealing the Cards there happens to be one faced, the Dealer is to go on without Interruption, unless it happens to be a *Black-Ace*, in which Case he is oblig'd to deal again. But if the Dealer should turn one of the Cards, then it is at the Choice of him it belongs to, either to receive it, or make him deal again. If there happens to be a great many Cards faced, they must be dealt again. If the *Ombre* plays *Sans Pendre*, and there happens to be a Card faced in the Stock, the Deal is to go for nothing. If the Dealer should give 10 Cards, either to himself, or any other, he must deal again if they demand it; for they may play tho' they have 10 Cards dealt them, provided they declare it before they take in: In which Case they are oblig'd to lay out one Card more than they take in, for if they have 10 Cards after they have taken in, they are *Beasted*; and likewise, if they should take in without declaring they have 10 Cards. If the Person who has 10 Cards dealt him, has a Mind to play *Sans Pendre*, he must shuffle his Cards, and one of the

the Company shall draw out a Card at Hazard, and put it among those which they discard.

Note also, That the Rules laid down for 10 Cards, are the same with 8, because the Reason is the same. He that has but 8 Cards, and would play *Sans Pendre*, must with 8 Cards win enough for his Game. If he takes in with 8 Cards, he may take in one Card more than he lays out.

He that plays (after he has asked Leave) discards 2 or 3 or more Cards, according to the Strength of his Game; and taking up the Remainder of the Pack, he serves himself with as many Cards from thence, as he has laid out; then laying his Discard at his left Hand, where the Pack laid before, he places the Remainder in the Middle of the Table, still remembering to name the Trump before he takes in.

When the *Ombre* has discarded, he that discards next to him, must not go to the Bottom of the Cards, *i. e.* ought to leave, at least, five Cards to him that takes last; unless he has a *Matadore*, and some other good Cards, whereby there is a Probability of winning three or four Tricks, otherwise he will spoil all by dividing the Trumps, which is a sure Way of giving the Game to the *Ombre*. Therefore it cannot be supposed that a *Matadore*, without any other Trumps, is a good Pretence for taking in a great many Cards; tho' it is not to be expected that he who goes to the Bottom of the Cards should propose to win as sure Tricks as if he was *Ombre*, for that seldom happens; but he should have a good Appearance, since the third Person is to assist him in making the *Ganos* of his Kings, and forcing the Trumps of the *Ombre*.

When the *Ombre* plays *Sans Pendre*, it is very easy for the other two to discard; he that is first may take eight or nine, but those that understand the Game, take Care to discard so that the Game should not be divided.

If after they have all taken in, there should be a Card left, he who discarded last may see it, if he pleases; in which Case all the rest have the same Liberty; but if he does not, and either of the other two should look at it, that Person is *Beasted*.

If any of the Gamesters should take in a Card more than he lays out, he is not *beasted* for this: If he has not look'd at his Cards, he is to return the last Card. If they are mixed with the rest of his Cards, the other two shall draw a Card at Hazard out of his Game, and put it into the Stock; if he should take one too few, it is much the same Thing; if the Stock is still upon the Board, he may take a Card; if they are all taken in, he must draw one by Chance out of the Discard.

The *Ombre* should be very attentive in observing how the others discard, and remember which of them takes in most Cards; for he may judge by that, where the Strength against him lies: In this Case if he finds he is not strong enough to win five Tricks, he must endeavour to give two Tricks to him whom he judges the weakest of the two; that though he beastes, none should win the Stakes, and make it a *Remise*.

When all have discarded, the eldest Hand plays first; and he who wins the last Trick next, as it is practised at all other Games.

If you have not a Card of that Suit which leads, you are not obliged to play a Trump, but you may do it for the Convenience of your Game.

When one of those that defends the Stake demands *Gano* of his Comrade, he ought to give it, if he can. The Meaning of this Word *Gano*, is, *I win*; or let it pass; so that he who demands *Gano*, may be supposed to have the best Game; and the other should pass the Trick to him. For Example, if the *Ombre* should play a *Spade*, and one of those that defend the Stake should play the Queen, and say *Gano*, or *Gano del Re*, his Comrade ought not to play the King; but in this Case he ought to have a small Spade in his Hand, otherwise he must play the King, or else be *beasted*. If after one has called *Gano*, his Com-

rade seems to hesitate or make Difficulty of it, he may call to him three Times, very earnestly, *To Gano si se puede*; which is, you must let me have it if you can; but *Gano* must never be demanded but to defend the Stake; and not with a Design to win *Codille*.

When one of those who defend the Stake, raps his Hand upon the Board on delivering his Card, it is to be understood as a Signal to his Comrade to play a high Trump, to force out the *Ombre's* Trump; which is not held unfair, since the Game allows it.

If you should separate one Card from the rest of your Game, so that the *Ombre* should see it, he may, if he pleases, oblige you to play it; provided that in playing it you do not make a *Renounce*.

As it is of great Consequence in this Game to know the Number of Trumps, and how many are out; every one has the Liberty of examining his own Tricks, and those of others: This is permitted on all Sides, as often as any shall think fit, though there be no Trumps play'd. If the Pack should not be true, the Game should go for nothing, if it be discovered in playing the Cards; but if it be not found out till after the Game is play'd, it stands good.

Whenever he who undertakes the Game (that is to say the *Ombre*) does not win, he is *beasted*: And to win the Stake he ought to make five Tricks; except five Tricks are divided betwixt his two Opponents; *i. e.* when one wins three, and the other two; for in this Case the *Ombre*, making four Tricks, wins the Game.

He is likewise *beasted* who plays with more or less than nine Cards; as likewise he who makes a *Renounce*; but it is not a *Renounce*, when one by Surprise has thrown down a wrong Card upon the Table; even when the Person that wins the Trick, has played again for a second Trick; if he has not folded up the first, he who play'd wrong may recover his Card and play again; but after the Trick is folded up it is too late, and he must submit to the *Beast*.

When one finds out that another has *renounced*, as that it is a Prejudice to his Game, he may oblige every one to take their Cards back and play over again, beginning with the Trick where the *Renounce* began. But if the Deal be finished the Cards must not be play'd over again.

Whoever *renounces* several times in a Deal, suffers a *Beast* for every *Renounce*.

The Tricks may be variously divided, according to which, one either saves or makes a *Beast*.

There are but two Ways for the *Ombre* to win, which we have spoke of already, and as many whereby he may be *beasted*.

When the Players win three Tricks a-piece, the *Ombre* is *beasted*, and this is what is called the *Remise by three*. When the *Ombre* wins four Tricks, and one of those that defend the Stake, four Tricks, the *Ombre* is likewise *beasted*, and this is also called *Remise*, *Risposte*, or *Respueste*. Therefore he who defends the Stakes, and has not the Game by which he may almost depend upon winning, at least three Tricks, should avoid winning above one; but assist his Comrade in getting four Tricks, in order to *beast* the *Ombre*.

Note, That all the *Beastes* that are made in one Deal must lie together upon the Board, and be played for the next. When there are many *Beastes* upon the Board, that which was laid down first is to be taken up first; afterwards, that which is of the highest Value. If one should be *beasted* for playing with ten Cards, and the *Ombre* for not winning his Number of Tricks; these are two *Beastes*, which with the Stake upon the Board, makes three Stakes, which are to be laid together, and play'd off the next Deal, unless they are separated by Agreement. He who makes many *Beastes* at one Deal, may put them all to one Stake if he pleases, and the others cannot hinder him. All *Beastes* which are made of what Nature soever, must be of the same Value which the *Ombre* is to take up if he wins, whether it consists of one, two, or more Fishes.

When

When the *Ombre* makes but four Tricks, and one of the Defendants five; or when the *Ombre* makes but three Tricks, one of the others four, and the third two, the *Ombre* is beasted; and he who wins more Tricks than the *Ombre*, takes up the Stake; and this is what is called winning *Codille*.

He who aspires at *Codille* should play with Honour, and, as observed before, never demand *Gano*, when he is sure of winning four Tricks; but as there is no Penalty in this Case, all the Defence we can have against such People, is to play with them no more.

When it happens that one of the Gamesters by his Play may either give the *Ombre* his Game, or give the other the *Codille*, he should rather give the *Codille*, and let the *Ombre* be beasted: The Reason is, that when the *Ombre* wins, he takes up the Stake; but, in the other Case, he lays one down for that which the *Codille* takes up.

If he who aims at *Codille* should call *Gano* at his fourth Trick, when he is sure of a fifth, he ought not to draw the Stake; though there is no Law to hinder him from it.

Some as soon as they have discarded, and seen the Cards they take in, if they find a very bad Game, will give it up, and yield themselves beasted, in order to prevent the *Codille*: But this does not seem fair; and as it is not any Part of the Game of *Ombre*, there is no Rule provided in this Case; however, it is never done among those who value themselves upon their good Manners: Therefore there is but one Way of disappointing a *Codille*, and that is by good Play.

When one Person gains the nine Tricks, it is call'd winning the *Vole*; which is attended with this Advantage, that he who wins it sweeps the Board, let there be ever so many Stakes upon it: And suppose there was but one Stake upon the Board, either double or single, in this Case he, who wins the *Vole*, gains double what lies upon the Table: As for Example, if there be a Stake of two Fishes, and two Counters before each Player (for each Player must stake before him) which were laid down for the *Passes*, each of the other two shall pay him, who wins the *Vole*, one Fish and three Counters, which makes the Stake upon the Board double; but if there be more Stakes than one upon the Board, he who wins the *Vole* must be content with them, without receiving any Thing from the other two Gamesters.

If many *Beastes* were made in one Deal, which by Consent, or by him who made the last *Beaste*, are put together; this is but one Stake, and he who wins the *Vole* shall have it made it up double to him by the other two, as was hinted.

It is very difficult to win the *Vole*, and therefore it should never be undertaken but upon a very good Title; for he who once engages in it, is obliged to go forward.

When the *Ombre* has won his five Tricks, and plays down one Card more without saying any Thing, he engages for the *Vole*; in which Case his two Adversaries have the Liberty of shewing each other their Game, and consulting how to defend it.

If he who undertakes the *Vole* should miscarry, the other two shall divide between them what lies upon the Board, but he shall pay them nothing; on the contrary, if he plays *sans prendre*, or has *Matadores* in his Hand, he shall be paid for them, though he does not take up any Thing.

Note, That as this Game requires a great deal of Application, it is necessary to set some Limits to the Continuance of the Play; therefore the Gamesters generally agree before-hand, how many *Tours*, or Stakes, they will play for, as ten, twenty, thirty, forty, more or less; after which, if any of them be disposed to leave off, he may throw up the Cards without Offence. Every Stake you play, you set aside a Counter to mark the *Tours*, and so on till they amount to the Number you agreed to

play; but a *Codille* is not to be marked as one. After you have play'd your Number of *Tours*, you may go on to the first *Beaste*, and this is often practised; but if any of the Gamesters should refuse it, you have no Reason to complain of him. If one of the Gamesters through Peevishness, or any other Cause, should throw up the Cards, before the *Tours* agreed upon are play'd out, he is oblig'd to pay, not only his own Losing, but likewise what either of the others lose, and the Cards.

When the *Ombre* leads, and has the first *Matadores* in his Hand, he should always play the highest of those *Matadores* first, to discover how the Trumps lay, and if they be divided or not: He may also do it, to see if it be possible to play for the *Vole*: For Example, he has perhaps, in his Hand, in black, *Spadille*, *Basto*, King, Queen, Knave, a small Trump, a King and a Queen, he must play *Spadille*, if he intends for the *Vole*, to discover if *Manille* be guarded.

Nothing puzzles more Beginners at this Game, as to know when they may venture to play, and when they should *pafs*; to remove this Doubt, they must take this for a general Rule, that to undertake the Game, they should have three sure Tricks; for the most that can be expected from taking in three or four Cards, is to win two Tricks more: But when a Man is perfect Master of the Game, and can by his Address manage it so as to divide the Tricks between his Adversaries, he may venture to play a bold Game.

But, however, as this Treatise is not written for Instruction of those who are Masters at *Ombre*, since they want none; we'll insert here a List of the smallest Games that can be play'd, beginning with the black Sort, *Clubs* and *Spades*.

I. <i>Manille</i> , the Duce <i>Basto</i> , Ace of Clubs King A small Trump.	II. <i>Spadille</i> , Ace of Spades <i>Basto</i> King A small Trump.
III. <i>Spadille</i> <i>Manille</i> King A small Trump.	IV. <i>Spadille</i> <i>Manille</i> 1 Trump 2 Trumps.
V. <i>Spadille</i> <i>Basto</i> Queen Seven.	VI. <i>Manille</i> <i>Basto</i> Queen 1 Trump 2 Trumps.
VII. <i>Spadille</i> King Queen Knave Seven.	VIII. <i>Manille</i> King Queen Knave Seven.
IX. <i>Basto</i> King Queen Knave Seven.	X. <i>Manille</i> <i>Basto</i> Seven Six Five Four.
XI. King Queen Knave Seven Six Five.	XII. <i>Spadille</i> King Five Four Three.

Note, That all the Cards, named here, must be of the same Colour, except the Black Aces: And that a King is never to be put out, tho' of a different Colour.

The Games which may be play'd in RED, are as follow :

I.
Spadille, Ace of Spades
Manille, the Seven
Punto, Ace of Trumps in
1 Trump. (Red)

III.
Spadille
Basto
Punto
1 Trump.

V.
Spadille
Manille
Knave
Three
A King.

VII.
Basto
Punto
King
Queen
Knave.

IX.
Manille
Basto
King
Queen
1 Trump.

XI.
Spadille
Basto
King
1 Trump
A King.

II.
Basto
Manille
Punto
1 Trump.

IV.
Spadille
Manille
King
Queen

VI.
Spadille
Basto
King
Queen
Knave.

VIII.
Manille
Punto
King
Queen
Knave.

X.
Manille
Basto
Knave
Duce
Three
Four.

VII.
Basto
King
Queen
Knave
Seven
Six
A King.

IX.
Spadille
King
Queen
Seven
Six
Four
A King.

VIII.
King
Queen
Knave
Seven
Six
Five
A King.

X.
Manille
King
Queen
Knave
Seven
Four
A King
A Renounce.

Games in RED, that may be play'd *Sans Prendre*.

I.
Spadille
Manille
Basto
3 Trumps
A King.

III.
Spadille
Manille
Basto
Punto
Queen
1 Trump
A King.

V.
Basto
Punto
3 Trumps
A King
A Queen guarded.

VII.
Manille
Basto
Punto
3 Trumps
A King
A Renounce.

II.
Spadille
Manille
Basto
King
1 Trump
A King.

IV.
Manille
Basto
Queen
Knave
2 Trumps
A King.

VI.
Punto
King
Queen
Knave
Duce
Three
Six
A King.

VIII.
Spadille
Punto
King
Queen
2 Trumps
A King
Queen guarded.

Note, That as there are more Trumps in *Red*, than in *Black*, your Game should be something better when you play in *Red*, because there are more against you; and that the Games marked here are the smallest that can be play'd upon the Cards.

Note, also, That you must have a better Game, when you are to play second, than if you were to lead or play first; for when you are thus hemm'd in, you will find it very hard to disengage yourself, unless you have a good Game; never venturing to play, when you are not the Leader, with several Cards of different Suits in your Hands, unless they be Kings.

From these small Games, which may be play'd with discarding, we'll pass to those which can be play'd *sans prendre*.

Games in Black, which may be play'd *sans prendre*.

I.
Spadille
Manille
Basto
King
1 Trump
A Renounce.

III.
Spadille
Manille
Basto
King
2 Kings.

V.
Basto
Manille
Queen
Knave
2 Trumps
King.

II.
Spadille
Manille
Queen
Knave
2 Kings
A Renounce.

IV.
Spadille
Manille
Basto
3 Trumps
A Renounce.

VI.
Manille
Basto
King
3 Trumps
A Renounce.

Note, That a good Player will venture to play upon a weaker Game when he is to lead, or play last, than when he is second; tho' a very good Player has sometimes lost a Game with four *Matadores* and three Kings; when the eight Trumps against him were all in one Hand; so that his Kings being all trumped, he won but four Tricks.

There are different Sorts of *Ombre*, viz. *force Spadille*, *Gascarille*, *Whim*, *Quadrille*, *Quintille*, and *single Ombre* between two.

Force SPADILLE, is play'd like the Game at *Ombre* we have described; every one speaks in his Turn, and if all pass, then he who has *Spadille* in his Hand is oblig'd to play, let his Game be ever so bad; therefore he has nothing to do but to name his Trump, and to discard: But he may pass, to see if either of the other two will put him out of his Pain, and play; if they do not, he must play.

When all pass, and No-body owns *Spadille*, the Cards that are left must be examined; and if it be not in the Stock, it must be in some Hand: In this Case, he who has it, and did not own it, incurs a *Beasse*, and the Deal is not to be play'd, because the Cards were seen.

Note,

Note, That this Manner of playing at *Ombre*, is diverting enough when People do not play for any Thing, because the *Beastes* happen almost continually, and the *Codille* is often won when it is least expected; but where People play for Money, it is quite different: For *Ombre*, which is a Game of Art and Judgment, when it is thus play'd, degenerates into a Game of Chance; and Conduct can be of no Use to a good Player, who finds *Spadille* in his Hand very ill attended.

GASCARILLE is the new Way of playing at *Ombre*, and is seldom practised but where People play for Trifles. The Method of it is thus; when all have passed, one Person declares to play *Gascarille*; then that Person lays out eight Cards, and after having taken in, and examined his Game, he names the Trump in that Suit in which he is the strongest. Sometimes he who plays *Gascarille* lays out all nine; and observes, that he is obliged to lay out at least eight. If he wins his Game, he is to receive three a-piece for *Gascarille*; if he loses it, he pays them three a-piece, and pays or receives for *Matadores* as at the other Games of *Ombre*.

WHIM, is another odd Way of playing at *Ombre*, and seems to be invented for Variety Sake: It is thus, when all have passed, one declares to play the *Whim*, turns up the Top Card of the Stock, and whatever Suit that happens to be of, is his Trump, and he is obliged to abide by it; then he discards, and takes what Number he pleases, and the Card turn'd up must be one of them. If he wins the Game, he receives nothing for playing the *Whim*, nor pays any Thing if he loses it; but he pays or receives for *Matadores*, as at the other Games of *Ombre*.

QUADRILLE, or *Ombre by four*, varies from *Ombre by three*, in having all the forty Cards dealt out; to each Person ten a-piece, viz. twice three, and once four; or once four, and twice three, as the Dealer pleases.

If in the Dealing any Card happens to be faced, the Deal is lost; for this Reason, that it is not just that any of the Players should lie under the Disadvantage of having any of his Cards known.

The *Ombre* may call what King he pleases, and even call one of his own, or any Queen except that of Trumps; but to call a Queen, he must have the four Kings in his Hand, and if he wants the King of Trumps, notwithstanding he has the three others, he is obliged either to call one of his Kings, or to pass.

He who draws from his Game a Card, and presents it as if he was going to play it, is oblig'd so to do, if his retaining it can do the Game any Prejudice, or give any Knowledge, or Intimation to the Friend, especially if it is a *Matadore*. He who plays *Sans Prendre*, or has called his own King, is not subject to this Law, by Reason that by discovering his Card he can reap no Advantage.

Note, That to play *Sans Prendre*, at *Quadrille*, is to call no King, or to play alone, or without a Partner.

He who renounces is not *beasted*, even if the Trick is taken off the Board, in Case he recollects, and perceives it before the Trick is turn'd down, by the Person who won it; but if it is turn'd down, he must be *beasted*. He is likewise *beasted*, if the Trick be cover'd with another Card, by the Person who won it, except he immediately recollects himself before the next Card is play'd; in which Case he may recover his Card, and must not be *beasted*.

He does not *renounce*, who, having forgot the Trump, has been told by any Body that the Trump is in such a Suit, and who, having none of the Card which is led, shall trump it with one of that Suit he has been told was Trumps; but he cannot take up his Card again, and the Trick must belong to him who won it.

He who without asking what is Trumps, shall trump with a Card which is not so, and shall have turn'd down the Trick, must be *beasted*, if it appears, or may

be suspected, that he did it with a fraudulent Design.

He who renounces several Times in one Deal, if it is not perceived till after the Tricks are turn'd down upon the Board, is to be *beasted* but once; but if after he has been made sensible of the first, he is still shew'd a second, and then a third, he must be *beasted* for every *Renounce* he made; and he must take up all his Cards, and play them over again.

It is not permitted either to those who undertake to play, or to those who defend the Stake, to discover their Cards before the Game is won, by Reason that the Friend of him who has shew'd his Cards, may make some Advantage of it; therefore he who does it must be *beasted*. But this Case does not regard him who plays *Sans Prendre*, or has called his own King; because his Game can be favourable to none.

Those who defend the Stake, tho' they have made six Tricks, are not to expose their Cards, but to continue playing to the last, to see whether the *Ombre* can win his three Tricks to avoid being *beasted* alone.

It is not permitted at *Quadrille* to speak at all, not even to say, *that is the King*; since the Person who is to play next, either ought to know that, or may find it out by the Tricks already made. He who speaks a Word in playing to encourage his Friend, must not pretend to the *Vole*; and he who says a Word to make him desist, must be *beasted*. It is not even permitted to say, *we have six Tricks*.

There is no Time prescrib'd when the *Beaste* is not to be forfeited; it may be demanded several Deals after, if he who won it, can prove that he won it in the same Deal, wherein it naturally should have been play'd for; but it is not so of the Mistakes that have been made in reckoning the *Beaste*.

The *Sans Prendre* and *Matadores*, are to be demanded before the Cards are cut for the next Deal, otherwise they are not to be paid.

If he who plays *Sans Prendre* with *Matadores*, demands through Mistake the one for the other, he must have nothing paid him, except he recollects himself before the Cards are cut.

He who playing *Sans Prendre*, shews his Game, which he has sure in his Hand, without naming the Trumps, is obliged to play in the Suit, which one of his Adversaries shall name.

When all the Players have passed, he who has *Spadille*, is forced to play; with this Advantage, that he is not *beasted* alone, tho' he does not win three Tricks; and he who plays thus, cannot pretend to the *Vole*, by Reason of the Advantage *Spadille* discovered may procure him.

He who having play'd *Sans Prendre*, and undertaken the *Vole*, but missed it, must pay to every one of the Players the Forfeit of the *Vole* he has lost; and must not be paid for *Sans Prendre*, *Matadores* if he had them, or the Rewards; nor must he even draw the Stake, or the *Beastes* that were play'd for; but he must not be *beasted* himself, except he lost the Game; in which Case he must pay all that is due for the Rewards, the *Sans Prendre*, the *Vole*, and the *Matadores* if he had them. The auxiliary King must have appeared before there is any Right to undertake the *Vole*, otherwise, as no Risque is run, so no Recompence is to be expected.

QUINTILLE, or *Ombre by five*, was play'd at first without Fishes, each Player taking only 20 or 30 Counters, valued at 5, 10, 15, 20, or 30 d. a-piece. They draw'd the Places, and when they had seen who was to deal, every one laid down a Counter before him, and had 8 Cards dealt him, and no more, which is the usual Way of Dealing at this Game, there being no Cards left, and consequently no Discard to be made.

The Manner of Speaking, and Beginning to play at *Quintille*, is the same as at *Quadrille*; and to win, five Tricks must be made.

He who has the *King*, which has been called, assists the *Ombre*, and if between them they make five Tricks, they have jointly won, and the *Ombre* takes up two of the three Counters, and the Friend one; unless

unless the Counters happen to be even, for then they divide equally.

It is a *Remise* when the *Ombre* and the auxiliary *King* make but four Tricks between them; in such Case the *Ombre* puts down two Counters, and the other one. They lose *Codille* if they make but three, and in this Case the other three Players have a Right to take up each of them one *Counter*.

If *Codille* is won, and there is four or five Counters down, each of the three who defended the Game, taking up one; there are either one or two remaining upon the Board. If there is but one, it belongs to him who has the highest Trump, if more it is for him who has the next best Trump.

If *Codille* is lost the first Time, the three Defendants who win it, take up each of them a Counter, and the remaining two are to be play'd for in the following Deal.

The four eldest Hands having *passed*, the fifth is obliged to play, let him have ever so bad a Game, calling however a King to his Assistance.

If the *Ombre* having called a King, happens to win the *Vole*, he receives two Counters from each of the Defendants; and if the Number chances to be odd, the auxiliary King has one: And he who undertakes to play for the *Vole*, and miscarries, incurs no Penalty, having nothing to pay to the other Players.

He who plays *Sans Prendre*, must name the Trump, and to win make five Tricks: If he wins he has two Counters paid him for the *Sans Prendre*, by each of the Defendants, and as much for each of the three *Matadores* if he had them; but should all his eight Cards have been Sequents of *Matadores*, he must expect no more.

If several *Beasts* are at once upon the Table, and he who plays *Sans Prendre* makes the *Vole*, he has no more than what is down, and two Counters from each of the Players. If there are only single Stakes upon the Board, he who plays *Sans Prendre*, and wins, of the five Counters that are down, besides his due for the *Sans Prendre*, draws only two, and consequently there remain three.

Whoever of the Players, except the youngest Hand, plays, after having asked, must name the Trump, and call to his Assistance any King except that of Trumps.

The *Matadores* are to be paid for only when they are found in one Hand, and the auxiliary King has no Share in that Payment, when they are in the *Ombre's* Hand; if on the contrary they are in the auxiliary King's Hand, they are to be paid to him; but if the *Ombre*, and the Friend are *beasted*, he of the two, who had the *Matadores* in his Hand, is to pay them to the rest, except to his Fellow-Loser. This Law is to be understood in the same Sense when they win jointly.

The Rules of the new *QUINTILLE* follow the Law of *Quadrille*, in every Point except where there is a Necessity of deviating from them. The *Stakes-marking*, and paying the Game, are the same as at *Quadrille*.

When you have agreed upon the Value of the Fish, the Places drawn, &c. the Dealer must stake down one Fish, and each of the others one Counter for the Game, after which the Dealer having caused the Cards to be cut by the left Hand Man, is to give 8 Cards a-piece, 4 at a Time. The Cards being dealt, every one is to speak in his Turn, beginning at the eldest Hand. If any one has a Mind to play with the Assistance of a King, he is to name the Trump (after he has asked the Question) and call a King; who in Conjunction with him to win, must make 5 Tricks. And they lose it by *Remise* if they make but four, and by *Codille*, if they make less. If they win they are paid the Rewards, and the *Matadores* in case they had them, whether they are *beasted* by *Codille* or *Remise*.

The *Beast*, or whatever else is to be paid, is done one half by the *Ombre*, and the other by the *King* his Ally; if in the Payment there happens to be an odd

Counter, the *Ombre* is to pay it; as in the winning they divide equally, and the odd *Counter* falls to the *Ombre's* Share.

In regard to playing *Sans Prendre*, the Laws of *Quadrille* are to be observed in all Points. When he who plays *Sans Prendre*, or calls a King he has in his Hand loses *Codille*, the four Players his Adversaries, divide among them, what was played for; and if there are any odd *Counters*, as it often happens, he of the four who had the highest Trump takes up one, the second is for the next best Trump, and the third, if there are three, for the next to that.

There is no *Risque* in undertaking the *Vole*, there being no Penalties for those who miss it; being only obliged to pay the *Vole* to their Adversaries, which *Vole* when won, is to be paid to those who make it, who jointly divide the Gain.

The *Vole* draws no more than what was play'd for; the Cards are cleared by a certain Number of *Counters*, as has been at first agreed upon to be play'd by each Player.

It is the best way for the *Ombre* to trump about as soon as he can, and likewise for the Friend, when the King that was called has appeared, or even before if he can, the better to accommodate the *Ombre's* Game, that his *Kings* may pass, which otherwise may run the Hazard of being trumped.

The first *Beast* is always of 15 *Counters*, the second of 45, except the Game, in which the first *Beast* was made, was won by *Codille*, in which Case the second is but 30. In each Case you must add the Number of 15 for each *Beaste*, according as they are made.

Single *Ombre*, is never play'd but when a third Person is wanting. The Manner of playing it, is exactly the same with the other *Ombre*. You must take an entire Suit out of the Pack, either Diamonds, or Hearts, then there will remain 30. You are to deal 8 Cards a-piece, beginning with 3 and 3, and last of all with 2 a-piece; which done there will remain 12 in the Stock, out of which the *Ombre* is to take as many as he pleases, the others may take the rest. When the Trump is named, you are paid for your *Matadores*, and lay down for your Passes here, as you do at *Ombre with three*. The *Ombre* is to win 5 Tricks to gain the Stake; when the Tricks are divided by 4 a-piece, it is a *Remise*; and if he who defends wins 5 Tricks, he wins *Codille*.

I'll conclude this Article of *Ombre*, with Mr. Pope's beautiful Description of the Manner of playing this Game, between *Belinda* and her two *Knights*, at *Hampton-Court*.

BELINDA now, whom Thirst of Fame invites,
Burns to encounter two advent'rous Knights
At Ombre singly to decide their Doom,
And swells her Breast with Conquests yet to come.
Strait the three Bands prepare in Arms to join;
Each Band the Number of the sacred Nine.
Soon as she spreads her Hand, th' Aerial Guard
Descend, and sit on each important Card:
First Ariel perch'd upon a Matadore,
Then each, according to the Rank they bore;
For Sylphs, yet mindful of their antient Race,
Arc, as when Women, wond'rous fond of Place.
Behold four Kings in Majesty rever'd,
With hoary Whiskers, and a forked Beard:
And four fair Queens, whose Hands sustain a Flower,
Th' expressive Emblem of their softer Power.
Four Knaves in Garb succinct, a trusty Band,
Caps on their Heads, and Halberds in their Hands;
And party-colour'd Troops, a shining Train,
Draw forth to Combat on the Velvet Plain.
The skilful Nymph reviews her Force with Care,
Let Spades be Trumps, she said, and Trumps they were.
Now move to War her sable Matadores,
In Shew like Leaders of the swarthy Moors.
Spadilla first, unconquerable Lord!
Led off two Captive Trumps, and swept the Board.
As many more Manilla forc'd to yield,
And march'd a Victor from the verdant Field.

*Him Basso follow'd, but his Fate more hard,
Gain'd but one Trump, and one Plebeian Card.
With his broad Sabre next, a Chief in Years,
The hoary Majesty of Spades appears;
Puts forth one manly Leg, to Sight reveal'd;
The rest in many colour'd Robes conceal'd.
The Rebel Knave, who dares his Prince engage,
Proves the just Victim of his Royal Rage;
Ev'n mighty Pam, that Kings and Queens o'erthrew,
And mov'd down Armies in the Fights of Lue;
Sad Chance of War! now, destitute of Aid,
Falls undistinguish'd by the Victor Spade.
Thus far both Armies to Belinda yield;
Now to the Baron, Fate inclines the Field.
His warlike Amazon her Host invades,
Th' imperial Consort of the Queen of Spades.
The Club's black Tyrant first her Victim dy'd,
Spite of his haughty Mein and barb'rous Pride:
What boots the regal Circle on his Head,
His Giant Limbs, in State unweildly spread;
That long behind he trails his pompous Robe,
And of all Monarchs, only grasps the Globe
The Baron now his Diamonds pours apace;
Th' embroidered King who shews but half his Face,
And his refulgent Queen with Powers combin'd,
Of broken Troops an easy Conquest find.
Clubs, Diamonds, Hearts, in wild Disorder seen,
With Throngs promiscuous strew the level Green.
The Knave of Diamonds tries his wily Arts,
And wins (O shameful Chance!) the Queen of Hearts.
At this, the Blood the Virgin's Cheeks forsook,
A livid Paleness spreads o'er all her Look;
She sees and trembles at th' approaching Ill,
Just in the Jaws of Ruin, and Codille.
And now (as oft in some distemper'd State)
On one nice Trick depends the gen'ral Fate;
An Ace of Hearts steps forth, the King unseen
Lurk'd in her Hand, and mourn'd his Captive Queen,
He springs to Vengeance with an eager Pace,
And falls like Thunder on the prostrate Ace.
The Nymph exulting, fills with Shouts the Sky,
The Walls, the Woods, and long Canals reply.*

PICQUET, or PICKET, is a celebrated Game at Cards (of French Invention) much in Use throughout the polite World. It is play'd between two Persons, with only 32 Cards; all the Duces, Threes, Fours, Fives, and Sixes being set aside.

In Reckoning at this Game, every Card goes for the Number it bears, as ten for ten; all Court-Cards go for ten, and the Ace for eleven; and the usual Game is one hundred up. In playing, the Ace wins the King, the King the Queen, and so down.

Twelve Cards are dealt round, usually by two and two, which done, the Remainder are laid in the Middle; if one of the Gamesters finds he has not a Court-Card in his Hand, he is to declare he has *Carte-Blanche*, and tell how many Cards he will lay out, and desire the other to discard that he may shew his Game, and satisfy his Antagonist that the *Carte-Blanche* is real; for which he reckons ten.

Each Person discards, *i. e.* lays aside a certain Number of his Cards, and takes in a like Number from the Stock; but he is not allowed to take more than five, though he can take less; for he must always leave three to his Partner, who may take them all three if he pleases, or leave them, or even all three if it suits best his Game; he can also take more than three, if his Adversary leave more, provided he discards as many as he takes; and see those he leaves; and the eldest Hand also, if he declares what Card he will lead, both are obliged to discard at least one Card, let their Game be ever so good.

After discarding the eldest Hand examines what Suit he has most Cards of, and reckons how many Points he has in that Suit; if the other has not so many in that or any other Suit, he is to tell one for every ten of that Suit: An Example will make this plain.

If the eldest has *Ace, King, Queen and Knave*, of any Suit; he asks, are 41 good? If the other cannot

reckon up as many or more, he shall tell 4 for them; for if he had 50 he should tell 5; if 60, 6, and so on. But suppose 35 in either Hand should be good, he who has them is to reckon as much as for 40, that is to say 4; and the same for any Number betwixt 35 and 40; but for any Number less than 5, nothing is reckoned: And for 41, 42, 43, or 44, you reckon but 4. He who thus reckons most is said to win the Point.

The Point being over, each examines what Sequences he has of the same Suit, *viz.* how many *Tierces*, *Quartes*, or fours, *Quintes*, or fives, *Sixiemes*, or sixes, &c. For a *Tierce* they reckon three Points, for a *Quarte* four, for a *Quinte* fifteen, and for a *Sixieme* sixteen, &c. And the several Sequences are distinguished in Dignity by the Cards they begin from: Thus, *Ace, King and Queen*, are called *Tierce Major*; *King, Queen and Knave*, *Tierce to a King*; *Knave, ten and nine*, *Tierce to a Knave*, all which tell 3. Likewise *Ace, King, Queen and Knave*, are called *Quarte Major*; *King, Queen, Knave, Ten*, *Quarte to a King*, and thus of the *Queen and Knave*, as in the *Tierces*; which *Quartes* tell 4. The *Ace, King, Queen, Knave, Ten*, are a *QUINTE Major*; the *King, Queen, Knave, ten and nine*, *QUINTE to a King*, &c. all *Quintes* tell 15. The *Ace, King, Queen, Knave, ten, nine*, are a *SIXIEME Major*, and this Sequence follows the same Order of the others, and tells 16. The best *Tierce, Quarte, Quinte*, or *Sixieme*, *i. e.* that which takes its Descent from the best Card, prevails, so as to make all the others in that Hand good, and destroy all those in the other Hand. In like manner a *Quarte* in one Hand sets aside a *Tierce* in the other.

The Sequences over, they proceed to examine how many *Aces, Kings, Queens, Knaves*, and *Tens*, each holds; reckoning for every three of any Sort, three: But here too, as in Sequences, he that with the same Number of Threes has one that is higher than any the other has, *e. gr.* three *Aces*, has all his others hereby made good, and his Adversary's all set aside: For Example, if I have three *Aces*, three *Knaves*, and three *Tens*, and my Adversary three *Kings*, my three *Aces* sets his three *Kings* aside, and make my three *Knaves* and three *Tens* good; so that I reckon of this Article only, nine, while my Adversary reckons nothing. Four of any Sort, *viz.* four *Aces*, or four *Kings, Queens, Knaves*, or *Tens*, are called a *Quatorze*, and tell 14. The *Quatorze* of *Aces*, setting aside that of *Kings*; that of *Kings*, the *Quatorze* of *Queens*; and thus of the *Knaves* and *Tens*, for you are allowed nothing for the Nines, Eights and Sevens.

All the Game in Hand being thus reckoned, the eldest proceeds to play, reckoning one for every one he plays above a nine, and the other follows him in the Suit; and the highest Card of the Suit wins the Trick. If two Cards of different Suits are play'd, that which leads wins the Trick, though the first was but a 7 and the last an *Ace*.

It is not the Person that wins the Trick who always reckons for it, and in some Cases both reckon one for the same Trick, of which this is an Example. If the Person who leads plays a tenth Card, he reckons one for it as soon as he plays it down; if another plays another Card that is higher he wins it, and also reckons one; thus they both reckon for the same Trick.

If the Leader plays an 8 or 7 he reckons nothing; and if the Follower should win it with a nine he reckons nothing; for as it has been observed before, a Card under a ten can't count at this Game: Nevertheless that Trick serves towards winning the Cards. It must be observed that the Follower, that is, he who plays last, never reckons for his Cards unless he wins the Trick; and that he who wins the last Trick reckons one for it, though it be won by any Card under a 10; and if it be won with a 10 or upwards he reckons 2 for it.

When the Cards are played out, each is to count his Tricks, and he that has most is to reckon 10 for winning the Cards; if they have Tricks alike neither is to reckon any Thing.

Note, That the first Thing that's reckoned at *Piquet* is the *Carte-Blanche*; if there be no *Carte-Blanche* the Point is the first Thing. The second Thing is the *Sequences*, as *Tierces*, *Quartres*, *Quints*, &c. The next are the *Threes* or *Quatorzes*; as three *Aces*, or four *Knaves*, or *Tens*, *Queens*, or *Kings*: For instance, if both Parties should be 95 of the Game, and one has in his Hand 45, or 50 for Point, which we will suppose to be good; and the other a *Quint*, or a *Quatorze* of *Aces*, he who has the Point wins the Game, because it is to be reckoned first; and the rest have the same Preference according to their Ranks. If one be 99 of the Game before he plays down the first Card, he plays it up if it be a tenth Card, tho' he loses the Trick. If the Parties are 99 each when they are to play down, the Leader must win the Game if he plays a tenth Card; because he tells as soon as he plays down, the other cannot till after the Trick is won. When the *Points*, *Tierces*, *Quartres*, or *Quintes*, are equal in both Hands, neither is to reckon any thing for them.

He who wins all the Tricks, instead of reckoning ten, which is his Right for winning the Cards, reckons 40: And this is called a *CAPOT*.

He who without playing down, can reckon up 30 in Hand, either in *Carte-Blanche*, *Points*, *Quints*, or *Quatorzes*, when the other has reckoned nothing, reckons 90 for them; and this is called a *REPIQUE*: And if he can make up above 30 in hand, he reckons as much above 90; *e. gr.* if he has 32, 33, or 34, he reckons 92, 93, 94, and so on.

He who can make up 30, part in hand and part by Play, before the other has told any thing, reckons them for 60; and this is called *PICQUE*. But if when he makes his 30, he should, by Mistake, omit saying 60, and reckon only 30, and so go on with 31, 32, and in playing the Cards out in this manner, he should afterwards recollect his Error, and reckon 30 more for the *Picque*; he is not to lose the Benefit of his *Picque*: But if he has marked up his Game, and the Cards are cut, and distributing for the Deal following, it is too late to recall, and his Game must stand as it is marked.

There is a great Number of Accidents attending this Game, and which are attended with Penalties: for,

1. If the Dealer by Mistake, or otherwise, should give a Card too many, or too few, it is at the Option of the eldest Hand either to play the Game, or make him deal again.

2. If the eldest having 13 Cards dealt him, will play, he must lay out 5 Cards and take in but 4; and if he plays when he has but 11 Cards dealt he must lay out a Card less than what he takes in. The Dealer is to do the same, if 11 or 13 Cards fall into his Hand; with this Difference, that it is the Choice of the eldest to play, or make him deal again.

3. If one should have 15 Cards, or but 9 dealt him, which may happen when the Dealer does not think what he is doing; in this Case the Cards must be dealt again, and neither have Power to hinder it.

4. He that has *Carte-Blanche*, *Point*, *Quinte*, or *Quatorze* in his Hand, and plays down a Card before he remembers to name it, loses the Benefit thereof; and so he does of every thing that is to be told in Hand, if he does not name them before he plays down.

5. If one Party names his *Point*, and the other allows it to be good, and does not remember to shew it before he plays down a Card, he must not reckon it; the same must be said of *Tierces*, *Quartres*, and *Quintes*, if he forgets to shew them before he plays down a Card; which gives an Opportunity to his Antagonist of telling his *Points*, *Tierces*, *Quartres* or *Quintes*, &c. though they are not so good; but the Antagonist must likewise shew them before he plays down to the Leader's Card, otherwise he loses the Right of reckoning them as well as the other.

6. He that has *Threes*, or *Quatorzes* of *Aces*, *Kings*, *Queens*, *Knaves*, or *Tens*, is not obliged to shew them.

7. If one should count a *Three* or *Quatorze*, which he has not in his Hand, though he laid it out by Mi-

stake; or otherwise, if the other finds it out at any Time, before the Cards are cut for the next Deal, he cuts him off from all he reckoned, and he is to count nothing that he got by the Deal. And if the eldest should count 3 *Aces* when he laid out one of them, and the other three *Kings*, or any thing else, he shall count his three *Kings*, though he does not discover the other's false Reckoning till the End of the Deal. But it must be observed, that though he who reckons false, can count nothing by the Deal, yet what he has in his Hand may hinder the other, and save a *Picque* or a *Repicque*: As for Example, he who counts 3 *Aces* false, and has a *Quint-Major* in his Hand, though he cannot count for it, yet it cuts the other off from counting one inferior *Quint*, *Quarte* or *Tierce*.

8. He that takes in a Card more than he lays out, counts nothing; but he that takes in a Card less than he lays out, may count his Game; and must play Card for Card with the other as long as his Cards last.

9. When one has 12 Cards and the other but 10; if he who has the 12 Cards should win 10 Tricks successively, then he has 2 Cards left in his Hand, which we'll suppose to be the King of *Spades*, and any small Card of another Suit; the other has but 1 Card, which we'll suppose to be the Ace of *Spades*; if the first plays his small Card, the other must play the Ace of *Spades* to it. Thus he suffers a *Capot* for Want of another Card; and this seems just, because it was his own Fault that he wanted a Card.

10. When one Card is once played out of Hand, it cannot be taken up again, unless it be the Case of a *Renounce*; if then by Mistake, one should throw down a Card of a different Suit when he has one of the same in his Hand, he may take it up again and play down the other.

11. If the Leader should play a King, and the other having the Ace of the same Suit in his Hand, should, in Surprize, play a small Card of the same Sort, he cannot recall it, but must be content to lose the Trick.

12. If a Player has three *Aces* in his Hand, and by Mistake, should count three *Kings* instead of three *Aces*, he counts nothing that Deal, provided he does not recollect his Mistake before he plays down his first Card; if he does he saves the Penalty.

13. If when the Deal is half played out, one of the Parties expecting to win no more Tricks, should throw up the Cards, and mix them with the rest; if he repents after, and would take his Cards up again, he is not allowed: But if they are not mixed with the rest he may take them up again, and play out the Deal.

14. When the Cards are play'd out, except two or three on one Side, and one supposing the other's Cards to be better than his own, should throw them down; but finding himself mistaken, he takes up his Cards again, he shall be oblig'd to play what Card the other directs him.

15. It is not allow'd in any Case to discard twice; nor to look before discarding, to examine the Cards you are to take in, even on the Outside, lest they should be known by their Back.

16. He that takes in first, should always tell how many he leaves, if he does not take in all his five; that the other may discard accordingly.

17. He that takes in a Card too many, and perceives it before he looks on them, may turn it back again, unless he mixes it with the rest of his Game; in which Case he loses the whole Profit of that Deal, and reckons nothing.

18. If any one takes the Cards to deal when it is not his Turn, and should deal them all out; and if the other examines his Cards, provided he that dealt by Mistake has not looked on his Cards also; he may throw them up to be dealt by the other.

19. If the Person who is to speak first, should shew a *Point*, or a *Tierce*, *Quarte*, or *Quinte*, &c. or a *Three*, or *Quatorze* of any Thing, which the other two should allow to be good; if, after this, he should find he was mistaken, and that he has a better of that Sort than the Eldest shew'd, he may count it afterwards: And

And he suffers nothing by this Mistake, provided there be not a Card play'd down.

20. He that has nothing in his Hand, but the *Carte-Blanche*, saves a *Picque* or a *Repique*.

21. If you should have in your Hand three Aces, three Kings, three Queens, three Knaves, or three Tens, and in discarding lay out one, or either of these, you are to count but three: Then the other may ask you which *Ace*, which *King*, &c. you laid out, and you are oblig'd to tell him; and if he requires it, you must shew him which you laid out.

22. If it should happen that the Pack should be false, (as sometimes there may be two Cards of a Sort) when it is found out, that Deal goes for nothing; but if you have play'd several Deals before with the same Pack, they are all good. If the Pack should be found false, the very first Deal you play you must adjust the Pack, and begin again; but you are not to cut again for Deal, for the first Cutting stands good.

23. Every Gamester is to lay his Discard near himself; which he has the Liberty of looking on as often as he pleases.

24. He that cuts the Cards is not to look at the Bottom; if he should, forgetting what he was about, they must be shuffled, and cut again.

25. Whoever is found taking a Card in, that he had laid out before, loses the Game.

26. When by Mistake one has taken a Card in, more than he had laid out before; and to avoid the Penalty, which is of reckoning nothing that Deal, he should attempt secretly to lay it out again, he is to lose the Game.

BASSET, is reckoned one of the most polite Games of the Cards, and only fit for Persons of the first Rank to play at.

The *Tailleur*, or *Dealer*, who keeps the *Bank* at *Basset*, having the sole Disposal of the *first* and *last* Card, with other considerable Privileges in dealing the Cards, and consequently a greater Prospect of gaining than those who play; the late King of *France* made a publick Edict, that the Privilege of a *Tailleur*, or one who keeps the *Bank* at *Basset*, should only be allow'd to *Cadets*, or younger Brothers of a noble Family; supposing, that whoever keeps the *Bank* must, in a very short Time, acquire a considerable Fortune: But all other Persons, for fear of ruining private Families, were *there* confined politically to a twelve-penny Bank, though here they have the Liberty of staking what they please.

The *Basset* has Terms particular to itself; *viz.* *Tailleur*, *Croupier*, *Punter*, *Fasse*, *Couch*, *Paroli*, *Masse*, *Pay*, *Alpieu*, *Sept-et-le-va*, *Quinze-et-le-va*, *Trente-et-le-va*, and *Soissante-et-le-va*.

The *TAILLEUR*, is the *Bank-Keeper*, who lays down a Sum of Money before all that play, to answer every winning Card, which shall appear in his Course of dealing.

The *CROUPIER*, is one who is assistant to the *Tailleur*, and stands by to supervise the losing Cards; that when there are a considerable Company at Play, he may not lose by overseeing any Thing which might turn to his Profit.

The *PUNTER*, is every Gamester who plays.

The *FASSE*, is the first Card that is turn'd up by the *Tailleur*, belonging to the whole Pack, by which he gains half the Value of the Money that is laid on every Card of that Sort by the *Punters*.

The *COUCH*, is the first Stake that every *Punter* lays upon each Card; every one who plays having a Book of 13 Cards before him, upon which he may lay his Money, more or less, according to his Fancy.

The *PAROLI*, is when whoever won the *Couch*, and having a Mind to go on to get a *Sept-et-le-va*, crooks the Corner of his Card, letting his Money lie, without being paid the Value of it by the *Tailleur*.

The *MASSE*, is when those who have won the *Couch*, and will venture more upon the same Card, who knows, or ought to know, the great Advantages the *Tailleur* has, and therefore should be subtle enough to make the best of his own Game.

The *PAY*, is when the *Punter* has won the *Couch*; and being fearful to make the *Paroli*, leaves off; for by going the *Pay*, if the Cards turn up wrong; he loses nothing, having won the *Couch* before; but if by this Adventure, Fortune favours him, he wins the Money that he staked.

The *ALPIEU*, is much the same as the *Paroli*; and like that Term, is used when a *Couch* is won by turning up, or crooking the Corner of the winning Card.

SEPT-ET-LE-VA, is the first great Chance, that shews the Advantages of the Game, *viz.* if the *Punter* has won the *Couch*, and then makes a *Paroli* by crooking the Corner of his Card, and going on to a second Chance, his winning Card turns up again, it comes to a *Sept-et-le-va*, which is seven Times as much as he laid upon his Card.

QUINZE-ET-LE-VA, is attending the *Punter's* Humour, who perhaps is resolved to follow his Fancy; and still lay his Money upon the same Card, which is done by crooking the third Corner of his Card, which coming up by the dealing of the *Tailleur*, makes him win fifteen Times as much Money as he staked.

TRENT-ET-LE-VA, is mark'd by the *Punter's* crooking or bending the End of the fourth Corner of his Card; which coming up, makes him win 33 Times as much Money as he staked.

SOISSANTE-ET-LE-VA, is the highest Chance that can happen in the Game, for it pays 67 Times as much Money as is staked, and is seldom won but by some *Punter*, who resolves to push the Extreme of his good Fortune to the Height: It cannot be won but by the *Tailleur's* Dealing the Cards over again, which, if his winning Card turns up, pays him with such a prodigious Advantage, and by the Courage and extraordinary Luck of a pushing *Punter* at this Game, some great Stake with *Soissante-et-le-va*, may turn up, and by that Means break the *Banker*.

Being thus informed of all the Terms of the Game; we'll play at *Basset*; or to speak more properly, some of my Pupils, who have Money, may, if they please, provided they don't ruin themselves and Family, sit round a Table, the *Tailleur* in the Midst of them, with the Bank of Gold and Silver before him, and the *Punters* each having a Book of 13 Cards, laying down 1, 2, 3, or more, as they please, with Money upon them, as Stakes; then the *Tailleur* takes the Pack altogether in his Hand, and turns them up, the bottom Card appearing is called the *Fasse*, and pays him half the Value of the Stakes laid down by the *Punters* upon any Card of that Sort.

After the *Fasse* is turned up, and the *Tailleur* and *Croupier* have look'd round the Cards on the Table; and taken half the Advantage of the Money laid on them, he proceeds in his Deal, and the next Card appearing, whether the King, Queen, Ace, or whatever it be, wins for the *Punter*, who may receive, if he has laid Money on such a Sort of Card, the Value; or making *Paroli* go on to *Sept-et-le-va*. The Card after that, wins for the *Tailleur*, who takes Money from each *Punter's* Card of that Sort, and brings it to his Bank.

The *Tailleur*, if the winning Card be a King, and the next appearing after it be a Ten, says (shewing the Card that appears to all the *Punters* round) *King wins, Ten loses*; pays the Money to such Cards as are of the winning Sort, and takes that to supply his Bank from those who lose; this done, he goes on with the Deal; as *Ace* wins, *Five* loses; *Knave* wins, *Seven* loses; and so every other Card alternately *winning* and *losing*, till all the Pack be dealt to the last Card, which turns up with an Advantage to the *Tailleur*; because by the Rule of the Game, which was contrived for his Benefit, tho' it be turned up, and the *Punter* may happen to have staked upon one of the same Sort, yet it is allow'd as one of his Dues, in relation to his Office, and he does not pay any Thing.

Note, That I do not think it necessary to enter here into a Detail of the Games common in *England*,

as *Whisk, Put, Cribbage, &c.* since almost every Body is acquainted with them; and would be of no other Service here, than to render this Treatise too voluminous; therefore I'll pass from *Basset* to those Games which are partly of Chance, and partly of Address, as the *Grande TRICK-TRACK*, and *Back-Gammon, &c.*

The *Grand TRICK TRACK*, is also of *French* Extraction, and commonly played by Persons of the first Quality. The most ready Way to learn this Game for a young Gamester, is to see it performed by two Masters; and then with the following Instructions, he will presently be let into the Secret.

1. It must be observed, that besides the Table-men with which you play, and which are to be placed on the Side of the Tables, there are three other Pieces used called *Markers*, whether Half-crowns, or Half-pence, or any other Coin. These *Markers* are to mark the Throw of your Dice, on the Points of the Tables which are advantageous to you: For Example, if in your first Tables you make single *Toots* in 3 Casts, you mark with one *Marker* 4.

2. The 12 Holes on the Sides of your Tables, with Pegs in them, are also used to mark the Game; for 12 Marks gained on the Points of your Tables, make one Hole, and the 12 Holes commonly make up the Game.

3. If you fill up your Points for every single Throw on the Dice, you make 4, and for *Doublets* 6; and may hold your Game as long as you think proper.

4. If you hold with your double Men on your Tables before you can make a Point, and your Adversary cannot fill his Table, you are obliged with your Man to pass over into his Tables, though it be commonly a Disadvantage; but if he throw so well as to fill up, then it alters the Marker and it cannot pass. As to those Men that are obliged to pass over into the Adversary's Tables, if he hits them he marks thus: For every single Throw 4, for *Doublets* 6; and if at any Time in throwing, you can mark over and above 12, you must then mark a Hole, or else 2 if you go double, and the Overplus remaining is called *to the Good*, provided you do not stake your Game.

5. You cannot go off nor break your Game by your Adversary's Throws; and if you chance to make more or less than is right, it is in his Power to take the Advantage, put you back, or oblige you to mark full.

6. If in playing this Game you touch a Man rashly, as intending to play it, and think to change it for another, you are obliged to play it as you before intended. This is what is most considerable in your *first Tables*.

As to your Adversary's second Tables; for every Man you hit of his with a single Die, you mark but 2, and for *Doublets* 4; though in his *first Tables* 4 for each single Die, and 6 for *Doublets*. If you chance to hit a Blot or two in his Tables and cannot pass, by reason of his Men standing in your Way and hindering you, he may make the Advantage of marking by your own Throws in both *Tables*.

The *Ace-Point* of both Corners in the second *Tables* cannot be divided here, nor fill the Corners, as at other Games; though in lieu of that Convenience, if the Dice favour, for each single Cast, you mark 4; and for *Doublets* 6.

As to that Part of the Game called *Gens de Retour*, or the *back Game*, which is the latter Part: Next bearing off your Men, as it is used in *Back-Gammon*, you play your Men as fast as you can into his Tables, endeavouring to fill up the Points as at the *fore Game*; which being done, you bear off your Men, only there is a Distinction between this and *Back-Gammon*, that as *Doublets* thrown at the last Cast give considerable Advantage to the Gamester there, it is here of no Value, nor gives any Addition to the Throw.

If at any Time you break up your Tables, and disorder your Men (except by gaining 12 Points you can

mark a Hole) it is in your Adversary's Power to oblige you to hold your Game on still, and to play all the Table-men, you have so touched and disordered, to his own Advantage.

The *single* may be distinguished from the *double* in this Manner: If your Adversary, by his ill Fortune in throwing, has no Points marked on his Table, altho' your Throw is single, yet still you may mark a double Point; but if otherwise he has such good Luck by the Dice to have any Point to mark, then he coins double, which you are to take off again if you can hit him.

BACK-GAMMON, is an ingenious Game, and requires a great deal of Skill to play it well. The Men, which are 30 in Number, are equally divided between you and your Adversary, and are thus placed; 2 on the *Ace-Point*, and 5 on the side of your left-hand Table, and 3 on the *Cinque*, and 5 on the *Ace-point* of your right-hand Table, answered on the like Points by your Adversary's Men with the same Number; or thus, 2 of your Men on the *Ace-point*, 5 on the double *Six*, or *Six-cinque* Points, 3 on the *Cinque-point* in your Tables, and five on the *Six-point* at home, and all these pointed alike by your Adversary.

In your Play have a Care of being too forward; and be not rash in hitting every Blot, but with Discretion and Consideration, move slowly but securely; by which Means, though your Adversary has filled his Tables, but with all Blots, and you by hitting him enter, you may win the Game; nay, sometimes tho' he has borne his Men all to a very few.

It is the Part of a prudent Commander as he leads out his Men, to bring them home as safe as possible: So must you have a Care of your Men as you are bringing them home, that they are not picked up by the Way.

Be sure to make good your *Trey-ace-points*; hit boldly, and come away as fast as you can; to which end if your Dice run high, you will make the quicker Dispatch.

When you come to bearing, have a Care of making when you need not; and *Doublets*, now, will stand you most in stead. If both bear together, he who is first off without *Doublets*, wins one. If both bear, and one goes off with *Doublets*, he wins two.

If your Table be clear, before your Adversary's Men be come in, that is a *Back-Gammon*, which is three; but if you thus go off with *Doublets*, it is 4.

Note, The Business of Chance, or Hazard, is of mathematical Consideration, in as much as it admits of more or less. It is, or is supposed to be an Equality of Chance, upon which the Gamesters set out: This Equality is to be broke in upon during the Course of the Game, by the greater good Fortune, or Address of one of the Parties; upon which he comes to have a better Chance; so that his Share in the Deposite, or Stakes, is, now, proportionably more, or better, than at first; this more and less is continually varying, and runs through all the Ratio's between Equality, and infinite Difference; or from an infinitely little Difference, till it arrives at an infinitely greater one, upon which the Game is ended. The whole Game therefore, with respect to the Event, or Issue thereof, is only a Change of the Quantity of each Person's Share, or Chance; or of the Proportion their two Shares bear to each other; which Mathematicks alone can measure.

Hence several Authors have computed the Variety of Chance, in several Cases and Circumstances that occur in *Gaming*; particularly M. de Moivre, in a Treatise, *de Mensurâ Sortis*; which as it may either be of Service to the practical Gamester, or the better, in teaching them on what Side the Advantage lies; and whether they lay on the Square, or to the speculative one, in letting him into the Way of thinking, and determining in such Cases, we shall here give the Reader an Abstract of.—Suppose p the Number of Cases wherein an Event may happen,

happen, and q the Number of Cafes wherein it may not happen; both Sides the *Contingent* and *Non-contingent*, have their Degrees of Probability; and if all the Cafes wherein the Event may, and may not happen, be equally easy; the Probability of the happening to that of not happening, will be as p to q .

If two Gamesters, A and B , engage on this footing; that if the Cafes p happen, A shall win; but if q happen B shall win; and the Stake be a Chance, or Expectancy of A will be $\frac{p a}{p+q}$; and that of B

$\frac{q a}{p+q}$; consequently if A or B sell their Expectancies, they should have for them, $\frac{p a}{p+q}$; and $\frac{q a}{p+q}$ respectively.

If there be two independent Events, and p be the Number of Cafes wherein the first may happen, and q the Number of those, wherein it may not happen, and p the Number of Cafes, wherein the second Event may happen, and s the Number of those wherein it may not happen; multiply $p+q$ by $r+s$; the Product, viz. $pr+qr+ps+qs$, will be the Number of Cafes, wherein the Contingency, or Non-contingency of the Events may be varied.—Hence if A lay with B , that both Events shall happen, the Ratio of the Chances will be as ps to $pr+qr+qs$. And if there were three, or more Events, the Ratio of the Chances would be found by Multiplication alone.

If all the Events have a given Number of Cafes wherein they may happen, and also a given Number of Cafes, wherein they may not; and a be the Number of Cafes wherein any one may happen; and b the Number of Cafes wherein it may not; and n be the Number of all the Events; raise $a+b$ to the Power of n .

If now A and B agree, that if one or more of the Events happen, A shall win; if none, B ; the Ratio of the Chances will be, as $a+b^n-b^n$ to b^n ; for the only Term where a is not found is b^n .

If A and B play with a single Die, on this Condition, that if A throws two or more Aces at eight Throws, he shall win; otherwise B shall win; what is the Ratio of their Chances?—Since there is but one Case wherein one Ace may turn up; and five wherein it may not; let $a=1$, and $b=5$. And again, since there are eight Throws of the Die, let $n=8$; and you will have, $a+b^n-b^n-nabn-1$, to $b^n+nabn-1$; that is, the Chance of A , will be to that of B , as 663991, to 10115625; or nearly as 2 to 3.

A and B , are engaged at single Quoits, and after playing sometime, A wants 4 of being up; and B 6, but B is so much the better Gamester, that his Chance against A upon a single Throw, would be as 3 to 2, what is the Ratio of their Chances?—Since A wants 4, and B 6, the Game will be ended at nine Throws at most; therefore raise $a+b$ to the ninth Power, and it will be $a^9+9a^8b+36a^7b^2+84a^6b^3+126a^5b^4+84a^4b^5+36a^3b^6+9a^2b^7+9ab^8+b^9$; and take all the Terms wherein a has 4 or more Dimensions, for A ; and all those wherein it has 6 or more, for B ; and the Ratio of the Chances will be as $a^9+a^8b+36a^7b^2+84a^6b^3+126a^5b^4+126a^4b^5$, to $84a^3b^6+36a^2b^7+9ab^8+b^9$. Call a , 3; and b , 2; and you will have the Ratio of the Chances in Numbers 1759077 to 194048.

A and B , are to play with two single Quoits; and A is the best Gamester, so that he can give B 2 in 3; what is the Ratio of their Chances then in a single Throw?—Suppose the Chances as 2 to 1; and raise 2+1 to its Cube; it will be $2^3+3 \times 2 \times 2+3 \times 2+1$. Now since A could give B 2 out of 3; A might undertake to win three Throws running; and consequently the Chances in this Case will be as 2^3 to $3 \times 2 \times 2+3 \times 2+1$. Consequently, $2^3=3 \times 2 \times 2+3 \times 2+1$, or $2 \times 2^3=2 \times 3+3 \times 2 \times 2+3 \times 2+1$; and therefore $2 \sqrt[3]{2}=2+1$; and consequently $2=\sqrt[3]{2+1}$. The Chances therefore are $\sqrt[3]{2+1}$,

and 1 respectively.

To find the Number of Cafes, wherein any given Number of Points may be thrown with a given Number of Dice. Let $p+1$, be the given Number of Points; n the Number of Dice; and f the Number of Sides or Faces of each Die; Let $p-f=q$, $q-f=r$, $r-f=s$, $s-f=t$, &c. the Number of Cafes will be,

$$+\frac{p}{1} \times \frac{p-1}{2} \times \frac{p-2}{3}, \&c. \\ -\frac{q}{1} \times \frac{q-1}{2} \times \frac{q-2}{3}, \&c. \times \frac{n}{1} \\ +\frac{r}{1} \times \frac{r-1}{2} \times \frac{r-2}{3}, \&c. \times \frac{n}{1} \times \frac{n-1}{2} \\ -\frac{s}{1} \times \frac{s-1}{2} \times \frac{s-2}{3}, \&c. \times \frac{n}{1} \times \frac{n-1}{2} \times \frac{n-2}{3}.$$

which Series is to be continued till some of the Factors either become equal to nothing, or negative. And note, some Factors of the several Products $\frac{q}{1} \times \frac{q-1}{2} \times \frac{q-2}{3}$, &c. $\frac{r}{1} \times \frac{r-1}{2} \times \frac{r-2}{3}$, &c. $\frac{s}{1} \times \frac{s-1}{2}$, &c. are to be taken as there are Units in $n-s$.

The Romans, besides their sacred, and honorary Games, had also ludicrous Games, which were of the same kind with the Games of Exercise and Hazard among us. Such were the *Ludus Trojanus*, or *Pyrreus*; the *Tesseræ*, and *Tali*, or Die, and the *Lattrunculi*, or Chesh; the *Discus*, or Quoit; the *Pila*, Ball; *Trochus*, Top; *Nuces*, Nuts; *Harpustum*, Foot-Ball; *Capita vel Navem*, Cross and Pile, &c.

The Trojan Games were instituted by *Ascanius*, Son of *Aeneas*, and which afterwards passed to the Romans, and were celebrated in the Circus by the Youth of Rome. One of the Number who presided at the Solemnity, was called *Princeps Juventutis*; and was always of one of the first Families of Rome.

At first, it is supposed, they only engag'd on Foot, and on Horseback; because *Virgil*, who describes these Games in the *Aeneid*, Lib. 5. only speaks of Horses and Cavaliers, without any Mention of Bigæ, and Quadrigæ, which were not in Use at Rome, till long after *Ascanius*. And yet *Dion*, speaking of *Cæsar's* Games, says, the Youth there combated in Chariots; but it is thought by some, that these were not the Trojan Games, but Races and Combats of a different Kind, proper for young People of a more advanced Age.

Others distinguish the antient Games into three Classes, viz. Races, Combats, and Spectacles. The first were called *Equestrian*, or *Curule Games*, *Ludi Equestres*, or *Curules*; being Races of Horses and Chariots, perform'd in the Circus in honour of the Sun and Neptune. There were six Kinds of Exercises in the Circus; the first Wrestling, fighting with Swords, with Staves, and with Pikes; the second was Racing; the third *Saltatio*, Dancing; the fourth *Disci*, Quoits, Arrows, and *Cestus*, all which were on Foot; the fifth was Horse-coursing; the sixth Courses of Chariots, whether with two Horses, or with four. In this last Exercise the Combatants were first divided into two Squadrons or Quadrils, then into four, each bearing the Name of the Colours they wore. *Fæstio Alba*, *Ruffea*, &c. at first they were only white and red; then green was added and blue. *Domitian* added two more Colours, but they did not hold. It was *Ænomaus* who first invented this Method of distinguishing the Quadrils by Colours. The Green was for those who represented the Earth; the Blue for the Sea, &c.

The second were called *Agonales*, and *Gymnici*, being Combats of Men or Beasts, in the Amphitheatre dedicated to *Mars* and *Minerva*.

The *Gymnici Ludi*, or *Gymnick Games*, were also Games of Exercise, viz. Wrestling, Running, Dancing, the Use of the Lance, Quoit-Playing, &c. It was these made the chief Diversions of the *Olympick*, *Nemean*, *Pythian*, and *Isthmian* Solemnities.

The last called *Scenici*, *Pœtici*, and *Musici*, were Tragedies,

Tragedies, Comedies, Balls, &c. represented on the Theatre sacred to *Venus*, *Apollo*, and *Minerva*.

Homer gives us a fine Description of the Games which *Achilles* instituted at the Funeral of his Friend *Patroclus*, in his *Iliad*; and others of the different

Games held among the *Pheaci*, *Ithacans*, and at the Court of *Alcinous*, in his *Odysee*. *Virgil's* Description of the Games celebrated by *Aeneas*, at the Funeral of old *Anchises*, is not inferior to any of them.

GAUGING.

GAUGING, is the Art or Act of measuring the Capacities, or Contents of all Kinds of Vessels; and determining the Quantity of Fluids, or other Matters contain'd therein. Or rather the Art of reducing the unknown Capacity of Vessels of divers Forms, cubical, parallelopedal, cylindrical, spheroidal, conical, &c. to some known cubick Measure; and of computing, for Example, how many Gallons, Quarts, Pints, or the like of any Liquor, *e. gr.* Ale, Beer, Wine, Brandy, &c. are contained therein.

The principal Vessels that come under the Operation of *Gauging*, are Pipes, Barrels, Rundlets, and other Casks; also Backs, Coolers, Fats, &c. and the Persons who practise that Art are called *Gaugers*, who are Officers appointed by the King, to *gauge*, or measure all Casks, Tuns, Pipes, Barrels, Hogheads, of Beer, Wine, Oil, &c. and to give them a Mark of Allowance (which is a Circle burnt with an Iron) before they be sold in any Place within the Extent of this Office.

The easiest and aptest Ways for Practice in *Gauging*, are those perform'd by the Help of Tables, or *Gauging-Rods*, purposely compos'd upon sliding Rules, of nine Inches or a Foot long; but before we give the particular Constructions of those Rods, and instruct our Pupil how to use them, I'll insert here some arithmetical Questions, on which those *Gauging-Rods* were first compos'd.

1. To find the *Area* of any square Tun, Back, or Cooler, either in Ale or Wine Gallons; the given Length or Breadth must be multiplied into itself, and the Product will be the *Area* in Inches; then that *Area* is divided by 282, which gives the *Area* in Ale-Gallons; and by 231, and the Quotient gives it in Wine Gallons: For Example, suppose the Side of a square Tun, Back, or Cooler, be 124.5 Inches, what will be its Content in Ale and Wine Gallons?

Area in Inches.

First, 1245 multiplied by 1245, gives } 15500. 25.
in the Product,

Gal. In.

Then 15500. 25 divided by 282, gives } 54. 96.
the Quotient in Ale Gallons,

Gal. In.

And 15500. 25 divided by 231, gives } 76. 10.
in the Quotient the *Area* in Wine Gallons,

Gal. In.

So that the Answer is for Ale, 54. 96.
And for Wine, 76. 10.

Note, That the Ale Gallon contains 282 cubical Inches, and that a Wine Gallon contains 231.

2. Suppose a Cask whose Diameter at the Bung is 31. 5, and at the Head 24. 5, and its Length 42 Inches, what will be the Content in Ale Gallons, and Wine Gallons? Unto twice the *Area* of the Bung Circle, must be added the *Area* of the Head Circle; and their Sum multiplied into one Third of the Length, and the Product will be the Content in their respective Gallons.

Gal. In.

First, 31. 5, multiplied by 31. 5, is 1984. 5.
And 24. 5, multiplied by 24. 5, is 600. 25.
Again, 1984. 5, added to 600. 25, makes 2584. 75.
And 2584. 75, multiplied by 42 } 108559. 5.
Inches, makes

Ale.

Then 108559. 5, divided by 1077. }
15, gives in the Quotient the Content } 100. 78.
in Ale Gallons,

Wine.

And 108559. 5, divided by 882. 35, }
gives in the Quotient the Content in } 123. 03.
Wine Gallons,

Answer } 100. 78, *Ale Gallons*,
 } 123. 03, *Wine Gallons*.

3. If the Diameter on the Head of a Vessel be 18 Inches, and at the Bung 32 Inches, and the Length is 40 Inches, what is the Content of that Vessel in Wine Gallons? Having found the Difference of the two Diameters at the Bung and Head of the Vessel, seven-tenths must be taken of that Difference; and the lesser Diameter added to it; then that Sum must be squar'd, and the Product reserv'd; that done, if the Content be requir'd in Wine Gallons, the Product reserv'd, this Decimal Fraction, 0034, and the Length of the Vessel must be multiplied one into the other (according to the Rule of continual Multiplication) so shall the last Product be the Number of Wine Gallons requir'd: But if the Content be requir'd in Ale or Beer Gallons, the Product before reserv'd, this Decimal Fraction, 00271, and the Length of the Vessel must be multiplied one into the other continually, so shall the Product be the Content in Ale Gallons. We'll explain this Rule by two Questions, one in Wine Gallons, and the other in Ale Gallons.

Question in Wine Gallons.

	<i>Gal. In.</i>
The Diameter at the Bung,	32. 0.
The Diameter at the Head,	18. 0.
Their Difference,	14. 0.
Which multiplied by seven-tenths, that is,	00. 7.
The Product will be	09. 8.
Which added to the lesser Diameter,	27. 8.
gives the mean Diameter,	
Which mean Diameter being squar'd	772. 84
(that is multiplied by itself) produces,	
Which said Product multiplied by,	0. 0034.
The Product then arising will be,	2. 6276+
Which multiplied by the Length of	40. 0
the Vessel, <i>viz.</i>	
The Product is the Number of Wine	105. 1040+
Gallons sought,	

Answer, 105. 1040+ *Wine Gallons*.

Note, The Superficies of any Figure is usually called its *Area*.

Question in Ale Gallons.

If the Diameter at the Bung of a Barrel of Ale be 25 Inches, the Diameter at the Head 20. 5 Inches, and the Length 32. 75 Inches, what is the Content of the Barrel in Ale Gallons?

	<i>Gal. In.</i>
The Diameter at the Bung,	25. 0+
The Diameter at the Head,	20. 5.
The Difference	4. 5.
Which multiplied by $\frac{7}{10}$, that is	0. 7.
The Product will be	3. 15.
Which added to the lesser Diameter	23. 65
gives the mean Diameter	
Which mean Diameter being squar'd,	559. 3225
that is multiplied by itself, produces	Which

Which Product multiplied by	0. 0027
The Product thence arising is —	1. 5101+
Which multiplied by the Length of	} 32. 75
the Vessel produces	
The Product is the Number of Ale-	} 49. 452
Gallons sought, viz.	

Answer 49. 452 Ale-Gallons.

On the Foundation above-mentioned on the Reason of the Rule to be granted, viz. that in every Gallon of Wine there is 231 cubick Inches, and 282 cubick Inches are equal to an Ale-Gallon: The Decimal considered as the Base of one Wine-Gallon, or as 1 is to 0034, so is the Square of the equated Diameter, to the superficial Content of that Circle in Wine-Gallons, and Parts of a Gallon: And after the same manner, supposing as before, 282 cubick Inches are equal to an Ale-Gallon, the Decimal 0027 prescribed in the said Rule, will be found out.

But the *Gauging-Rods* or *Rules*, do this Business at once, and answer the Questions without so much Calculation; which is no inconsiderable Addition, both to the Ease and Dispatch of the Work. But before we can pretend of being capable to practise this instrumental Method of *Gauging*, we must give the Description of the *Gauging-Rod*, as it will be represented in our *Table of Surveying*, under the Letter S.

For the Construction of that *Rod*, the Diameter *AB* fig. 12. of a cylindrical Vessel, *ABCD* is taken that holds one of the Measures wherein the Fluid is estimated, *e. gr.* Gallons, and is joined to the indefinite Line *A 7.* from *B* to *1*, a right Line is set off equal to *AB*; then *B 1* is the Diameter of a Vessel which holds two Measures or Gallons, of the same Height as the former. Again *A 2 = B 2*, are let; then *B 3* is the Diameter of a Vessel that holds three Measures, but of the same Height of that which only holds one: And after the same manner are found the Diameters of other larger Vessels, *B 4*, *B 5*, *B 6*, *B 7*, &c. Lastly, the several Divisions thus found, *A 1*, *A 2*, *A 3*, &c. are set off upon the Side of a Rod, or Rule; and the other the Height or Depth of a Cylinder that holds one Measure or Gallon, repeated as often as it will go. Thus is the *Gauging-Rod* complete: For Cylinders that have the same Altitude, are to each other as the Squares of their Diameters; consequently the Square of the Diameter that holds 2, 3, or 4 Gallons, must be double, triple, or quadruple of that which only holds one. And since in the first *AB = A 1*, the Square of *B 1* is double, that of *B 2* triple, that of *B 3* quadruple, &c. it is evident, that the right Lines *A 2*, *A 3*, *A 4*, &c. are the Diameters of the Vessels required. These Divisions therefore being applied to the Sides of a cylindrical Vessel, it will immediately appear how many Measures, *e. gr.* Gallons, a cylindrical Vessel of that Base, and of the Height of that which holds one Gallon, will contain. Wherefore, finding by the Divisions on the other Side of the Rod, how often the Height of one Gallon is contained in the Height of the given Vessel; and multiplying the Diameter before found by this Number, the Product will be the Number of Gallons the Vessel contains. Thus, *v. gr.* if the Diameter of the cylindrical Vessel be 8, and its Height 12, its Contents will be 96 Gallons.

Note, 1. The less you take the Height of the Cylinder, containing one Gallon, the greater will be the Diameter of the Base: Whence both that, and the Diameters of the Cylinders, containing several Gallons, will be more easily divided into lesser Parts. *Boyer* directs such Height to be only one Digit, or Tenth of an Inch. 2. The Diameters of Vessels holding one or more decimal Parts of a Gallon, will be had by dividing one or more decimal Parts of the Vessel holding a whole Gallon by its Height; which gives us the Area of the circular Base; and after the same manner the Diameters are found for the Divisions of Vessels, that hold two or more Gallons.

To find the Content of a Cask by the *Gauging-Rod*, that is, to determine the Number of Measures, *e. gr.* Gallons it will hold: The *Gauging-Rod* must be applied to the Vessel, as directed in the preceding Article; and both the Length of the Cask *AC* fig. 13. and both Diameters *GH* and *AB* found; and as we find by Experiment, how far soever it may be from geometrical Exactness, that a common Cask of this Form, may safely enough be reputed as a Cylinder, whose Base is a Medium between the Head and the Belly; we must find such Medium which is called the *equated Diameter*: Then multiplying the Number thus found, by the Length of the Cask *AC*; the Product will be the Number of Measures the Vessel contains. Suppose, *e. gr.* *AB = 8*, and *GH = 12*, and *AC = 15*; the equated Diameter will be 10; which multiplied by 15, gives the Capacity of the Cask 150 Measures. If it happens that the Diameter of the two Ends be not equal, they must be both measured, and half their Sum taken for the Diameter to work by.

There is another Method, whereby the Content of a Vessel is had without any Calculation at all, which obtains in divers Parts of *Germany* and the *Low Countries*: But as this supposes all Vessels to be similar to each other; and their Length double of the equated Diameter, that is, of half the Sum of the Diameters *AB* and *GH*; it is not safe to use it in all Places. *Kepler* however prefers it so much before all others, as including all the Precautions possible; that he recommends it to the Publick to enact it by Law, that all Casks be made in that Proportion.

The Method of *Gauging* (which chiefly obtains in *England*) are by the four Foot *Gauging-Rod*, and *Everard's Sliding-Rule*.

The four Foot *Gauging-Rod* is usually made of Box, and consists of four Rules, each a Foot long, and about three Eighths of an Inch square, joined together by three Brass Joints; by which Means the Rod is rendered four Foot long, when the four Rules are quite opened, and but one Foot when they are folded together. On the first Face of this Rod marked 4, are placed two diagonal Lines, one for Beer, and the other for Wine; by means of which the Contents of any common Vessel, in Beer, or Wine-Gallons may be readily found, by putting the Rod in at the Bung-hole of the Vessel, till it meets the Intersection of the Head of the Vessel with the Staves opposite to the Bung-hole. For Distinction of this Line, there is writ thereon *Beer, and Wine-Gallons*. On the second Face, 5, are a Line of Inches, and the *Gauge Line*; which is a Line expressing the Areas of Circles, whose Diameters are the correspondent Inches in all Gallons. At the Beginning is writ *Ale Area*. On the third Face, 6, are three Scales of Lines; the first, at the End of which is writ *Hogshead*, is for finding how many Gallons there is in a Hogshead when it is not full, laying with its Axis parallel to the Horizon. The second Line, at the End of which is writ *B. L.* signifying a *Butt Laying*, is for the same Use as that for the Hogshead. The third Line is to find how much Liquor is wanting to fill up a Butt when it is standing: At the End of it is wrote *B. S.* signifying a *Butt Standing*. Half way the fourth Face of the *Gauging-Rod*, 7, are three Scales of Lines, to find the Wants in a Firkin, Kilderkin and Barrel, lying with their Areas parallel to the Horizon, they are distinguished by Letters *F. K. B.* signifying a *Firkin, Kilderkin* and *Barrel*.

To find the Content of a Vessel in Beer or Wine-Gallons, with the diagonal Lines on the *Gauging-Rod*, the brass End of the *Gauging-Rod* must be put into the Bung-hole of the Cask, with the diagonal Lines upwards, and the Brass End thrust to the meeting of the Head and Staves: Then a Mark is made with Chalk on the Middle of the Bung-hole of the Vessel, and also on the diagonal Lines of the Rod, right against, or over one another, when the Brass End is thrust home to the Head and Staves. Then the *Gauging-Rod* is turned to the other End of the Vessel, and

and the Brads End thrust home to the End as before.

Lastly, it must be observed if the Mark made on the *Gauging-Rod*, come even with the Mark made on the Bung-hole, when the Rod was thrust to the other End; which if it be, the Mark made on the diagonal Lines will on the same Lines, shew the whole Contents of the Cask in Beer or Wine-Gallons. If the Mark made on the Bung-hole, be not right against that made on the Rod, when put the other Way; then right against the Mark made on the Bung-hole, must be made another on the diagonal Lines: And the Division on the diagonal Line between the two Chalks, will shew the Vessel's whole Contents in Beer or Wine-Gallons. Thus *e. gr.* if the diagonal Line of a Vessel be 28 Inches four Tenths, its Contents in Beer-Gallons will be near 51, and in Wine-Gallons 62.

If a Vessel be open, as a half Barrel, Tun, or Copper, and the Measure from the Middle on one Side, to the Head and Staves, be 38 Inches, the diagonal Line gives 122 Beer-Gallons; half of which, *viz.* 61, is the Content of the open half Tub. If you have a large Vessel, as a Tun or Copper, and the diagonal Line, taken by a long Rule, proves 70 Inches, the Content of that Vessel may be found thus: Every Inch at the beginning End of the diagonal Line must be called ten Inches; thus ten Inches become 100 Inches; and every tenth of a Gallon, must be called 100 Gallons; and every whole Gallon, 1000 Gallons. For Example: At 44.8 Inches, on the diagonal Beer Line, is 200 Gallons; so that 4 Inches 48 Parts, now called 44 Inches 8 Tenths, is just two Tenths of a Gallon, now called 200 Gallons: Thus also, if the diagonal Line be 76 Inches and 7 Tenths, a close Cask of such Diagonal will hold 1000 Beer Gallons: But an open Cask, but half so much, *viz.* 500 Beer Gallons.

To find the Content of any cylindrical Vessel in Ale Gallons, with the *Gauge-Line*: Seek the Diameter of the Vessel in Inches, and just against it, on the *Gauge-Line*, is the Quantity of Ale Gallons contained in one Inch deep; this multiplied by the Length of the Cylinder, will give its Content in Ale-Gallons. For Example: Suppose the Length of the Vessel 32.06, and the Diameter of its Base 25 Inches, what is the Content in Ale-Gallons?—Right against 25 on the *Gauge-Line*, is one Gallon, and .745 of a Gallon; which multiplied by 32.06, the Length gives 55.9447 Gallons for the Content of the Vessel.

The Bung Diameter of a Hoghead being 25 Inches, the Head Diameter 22 Inches, and the Length 32.06 Inches, to find the Quantity of Ale-Gallons contain'd in it, you must seek 25 the Bung Diameter on the Line of Inches; and right against it, on the *Gauge-Line*, you will find 1.745: Taking one Third of it, which is .580, and setting it down twice, you must seek 22 Inches the Head Diameter, and against it you will find on the *Gauge-Line* 1.356; one Third of which added to twice .580, gives 1.6096; which multiplied by the Length 32.06, the Product will be 51.603776, the Content in Ale-Gallons, provided the aforesaid Hoghead be in the Figure of the middle Frustum of a Spheroid.

The Use of the Lines, or the two other Faces of the Rod, is very easy; since it is only to be put down right into the Bung-Hole (if the Vessel you desire to know the Quantity of Ale-Gallons contain'd therein be lying) to the opposite Staves; and then where the Surface of the Liquor cuts any one of the Lines appropriated to that Vessel, will be the Number of Gallons contain'd in that Vessel.

Everard's Sliding Rule, is ordinarily made of Box, a Foot long, an Inch broad, and $\frac{1}{8}$ of an Inch thick. It consists of three Parts; a Rule on each Side with Grooves, and two small Scales, or *Sliding Pieces*, which slide in the Grooves. When both these Pieces are drawn out to their full Extent, the Instrument is three Feet long. On the first broad Face of the Instrument are four Lines of Numbers; the first marked A, consisting of two Radius's, numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; and then 2, 3, 4, 5, &c. to 10.

On this Line are four Brass Centre-Pins, two in each Radius; one in each whereof is mark'd MB, to signify that the Number it is set against, 2150.42, is the cubick Inches in a Malt Bushel; the other two are marked with A, to signify that the Numbers they are set against, *viz.* 282, are the cubick Inches in an Ale-Gallon. The second and third Lines of Numbers, are on the *Sliding Pieces*, and are exactly the same with the first. Close to the Figure 7, in the first Radius, is a Dot marked S i, set exactly over 707, denoting .707 to be the Side of a Square inscribed in a Circle, whose Diameter is Unity. Close to 9 is another Dot, mark'd S e, set over .886, which is the Side of a Square, equal to the Area of a Circle, whose Diameter is Unity. Another Dot, nigh W, is set over 231, the Number of cubick Inches in a Wine-Gallon; and another near C, is set over 3.14, the Circumference of a Circle, whose Diameter is Unity. The fourth Line of Numbers, mark'd MD, to signify *Malt Depth*, is a broken Line of two Radius's, number'd 2, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 9, 8, 7, &c. the Number 1 being directly set against MB on the first Radius.

On the second broad Face, mark'd *cd*, are, 1. A Line of Numbers of one Radius, number'd 1, 2, 3, &c. to 10, noted by the Letter D, on this are four Centre-Pins; the first mark'd WG, is the *Gauge-Point* for a Wine-Gallon, *i. e.* the Diameter of a Cylinder, whose Height is an Inch, and Contents 231 cubick Inches, or a Wine-Gallon, which is 17.15 Inches; the second Centre-Pin AG, stands at the *Gauge-Point* for an Ale-Gallon, which is 18.95 Inches; the third MS, stands at 46.3; the Side of a Square, whose Content is equal to the Inches in a solid Bushel; the fourth MR, is the *Gauging-Point* for a Malt-Bushel, which is 52.32 Inches.—2. Two Lines of Numbers on the *Sliding Piece*, which are exactly as those on the *Sliding Piece* on the other Side. Close to the Division 8 is a Dot mark'd *c*, which is set to .795, the Area of a Circle, whose Diameter is Unity; and another mark'd *d*, stands at .785, the Area of a Circle, whose Diameter is Unity.—3. Two Lines of Segments; each number'd 1, 2, 3, to 100; the first for finding the Allage of a Cask, taken as the middle Frustum of a Spheroid, lying with its Axis parallel to the Horizon; and the other for finding the Allage of a Cask standing.—Again, on one of the narrow Sides, noted *e*, are 1. A Line of Inches, number'd 1, 2, 3, &c. to 12; each subdivided into ten equal Parts; 2. A Line by which, with that of Inches, we find a mean Diameter for a Cask, in the Figure of a middle Frustum of a Spheroid; it is number'd 1, 2, 3, &c. to 7; and mark'd Spheroid. 3. A Line for finding the mean Diameter of a Cask, in the Figure of a middle Frustum of a parabolick Spindle, which *Gaugers* call the second Variety of Casks; it is number'd 1, 2, 3, 4, &c. and noted *Second Variety*. 4. A Line by which we find the mean Diameter of a Cask of the third Variety, *i. e.* of a Cask in the Figure of two parabolick Conoids, abutting on a common Base; it is number'd 1, 2, 3, and noted *third Variety*.—On the other narrow Face, mark'd *f*, are, 1. A Foot divided into 100 equal Parts, mark'd fM. 2. A Line of Inches, like that before-mention'd, noted IM. 3. A Line for finding the mean Diameter for the fourth Variety of Casks, which is the middle Frustum of two Cones, abutting on a common Base; it is number'd 1, 2, 3, &c. and noted fC, signifying Frustum of a Cone.—On the Backside of the two *Sliding Pieces*, are, a Line of Inches, from 13 to 36, when the two Pieces are put End-wise; and against that the correspondent Gallons, or hundred Parts, that any small Tub, or the like open Vessel (from 13 to 36 Inches Diameter) will contain at one Inch deep. After this Distinction of *Everard's Sliding Rule*, we must apply it to the Use we intend to make of it in this Place, *viz.* *Gauging*. Beginning, by finding the Area in Inches, or in Wine, or Ale-Gallons, of the Diameter of a Circle given; and supposing that Diameter 20 Inches, will set 1 upon D, to .785 (noted

ted *d*) on *C*; then against 20 on *D* is 314.159 the Area required. Now to find that Circle's Area in Ale-Gallons, we'll set 18.95 (mark'd *A G*) upon *D*, to 1 on *C*; then against the Diameter 20 upon *D*, is the Number of Ale-Gallons on *C*, viz. 1.11. The same may serve for Wine-Gallons, having only Regard to the proper *Gauge-Point*.

The two Diameters of an Ellipsis being given, to find the Area in Ale-Gallons. Suppose the transverse Diameter 72 Inches, and the Conjugate 50; we'll set 359.05, the Square of the *Gauge-Point* on *B*, to one of the Diameters (suppose 50) on *A*; then against the other Diameter 72 on *B*, we will have the Area on *A*, viz. 10.02 Gallons, the Content of this Ellipsis at one Inch deep: The like may be done for Wine-Gallons, if instead of 359.05 we use 249.11 the Square of the *Gauge-Point* for Wine-Gallons.

To find the Area of a *Triangular Surface*, in Ale-Gallons: Suppose the Base of the Triangle 260 Inches, and the Perpendicular let fall from the opposite Angle 110 Inches; we'll set 282 (mark'd *A*) upon *B* to 130, half the Base on *A*; then against 110 on *B* is 50.7 Gallons on *A*.

To find the Content of an *Oblong* in Ale-Gallons: Suppose one Side 130 Inches, and the other 180; we'll set 282 on *B*, to 180 on *A*; then against 130 upon *B* is 82.97 Ale Gallons, the Area required.

To find the Content of a *regular Polygon*, in Ale-Gallons, one of the Sides being given: We find the Length of the Perpendicular let fall from the Centre to one of the Sides; this multiplied by half the Sum of the Sides, gives the Area. For an Instance: Suppose a Pentagon, whose Side is 1 Inch; here the Perpendicular will be found .837, by saying as the Sine of half the Angle at the Centre, which in this Polygon is 36°, is to half the given Side .5, so is the Sine of the Complement of 36°, viz. 54° to the Perpendicular aforesaid: Whence the Area of a Pentagon, whose Side is Unity, will be found 1.72 Inches; which divided by 282, give .0061 the Ale-Gallons in that Polygon.

To find the Content of a Cylinder in Ale-Gallons: Suppose the Diameter of the Base of the Cylinder 120 Inches, the perpendicular Height 36 Inches; we'll set, therefore, the *Gauging-Point* (*A G*) to the Height 36 on *C*; then against 120, the Diameter on *D*, is found 1443.6, the Content in Ale-Gallons.

The Bung and Head-Diameters of any Cask, together with its Length, being given; to find its Content in Ale or Wine-Gallons: 1. Suppose the Length of a Cask taken (as the middle Frustum of a Spheroid, which is the first Case or Variety) be 40 Inches, its Head-Diameter 24 Inches, and Bung-Diameter 32 Inches; we'll subtract the Head-Diameter from that of the Bung, the Difference is 8. Then we look for 8 Inches on the Line of Inches; on the first narrow Face of the Rule; and against it, on the Line spheroid, stands 56 Inches, which added to the Head-Diameter 24, gives 29.6 Inches, for that Cask's mean Diameter; we set therefore the *Gauge-Point* for Ale (mark'd *A G*) on *D*, to 40 on *C*; and

against 29.6 on *D*, is 97.45, the Content of the Cask in Ale-Gallons. If the *Gauge-Point* for Wine (mark'd *W G*) be used instead of that for Ale, we'll have the Vessel's Content in Wine-Gallons. 2. If a Cask of the same Dimensions as the former be taken (as the middle Frustum of a parabolick Spindle, which is the second Variety) we'll see what Inches, and Parts, on the Line mark'd second Variety, stand against the Difference of the Bung and Head-Diameters, which in this Example is 8; and we'll find 5.1 Inches, which added to 24, the Head-Diameter, makes 29.1 Inches, the mean Diameter of the Cask; we'll therefore set the Rule as before, and against 29.1 Inches, we'll have 94.12 Ale-Gallons for the Content of the Cask. 3. If the Cask taken be the middle Frustum of two parabolick Conoids, which is the third Variety; against 8 Inches, the Difference of the Head and Bung-Diameter, on the Line of Inches, we'll find 4.57 Inches on the Line call'd *third Variety*; this added, as before, to 24, gives 28.57 for the Cask's Mean-Diameter: Proceeding as before, we'll find the Content 90.8 Gallons. 4. If the Cask taken be the Frustums of two Cones, which is the *fourth Variety*, against 8 Inches, on the Line of Inches, we'll find on the Line mark'd *f C* 4.1 Inches, to be added to 24 Inches: The rest carried on as before, gives the Content of the Cask 87.93 Ale-Gallons.

A Cask partly empty, lying with its Axis parallel to the Horizon, to find the Quantity of Liquor therein, we find its whole Content as above; which suppose 97.455 Gallons, and suppose the Inches left dry 8, and the Bung-Diameter 32: Then as the Bung-Diameter on *C* is to 100 on the Line of Segments *L*, so are the dry Inches on *C* to a fourth Number on the Line of Segments: And as 100 upon *B* is to the Cask's whole Content on *A*, so is that fourth Number to the Liquor wanting to fill up the Cask; which subtracted from the whole Content of the Cask, gives the Liquor remaining therein: *E. gr.* Set 32, the Bung-Diameter on *C*, to 100 on the Segment Line *L*; then against 8, the dry Inches on *C*, stands 17.6 on the Segment-Line: Set therefore 100 on *B*, to the Cask's whole Content on *A*; and against 17.6 on *B*, you have 16.5 Gallons on *A*; subtracting therefore the said Gallons from 97.45, the Vessel's whole Content, the Liquor in the Cask will be 8.95 Gallons.

To find the Liquor in a Cask standing upright, or with its Axis perpendicular to the Horizon; suppose the Length of the Cask 40 Inches, and 10 of them dry; we'll set 40 Inches on the Line *C*, to 100 on the Segment Line *S*; and against 10, the dry Inches on the Line *C*, stand 24.2 on *S*, the Segment Line. Then we set 100 on *B*, to 97.455, the Cask's whole Content on *A*; and against 24.2 on *B*, we'll have 23.5 Gallons, which is what is wanting to fill up the Cask; this therefore subtracted from the whole Content 97.455, gives 73.955 Gallons, for the Quantity of Liquor remaining in the Cask.

GEOGRAPHY.

GEOGRAPHY, *Γεωγραφία*, (formed from *Γη*, Terra, Earth, and *γραφω*, *scribo*, to write) is the Doctrine or Knowledge of the Earth, both as in itself, and as to its Affections; or a Description of the terrestrial Globe, and particularly of the known inhabitable Part thereof, with all its Parts.

Geography is distinguished from *Cosmography*, as a Part from the whole; this latter considering the whole visible World both Heaven and Earth; and from *Chorography*, and *Topography*, as the whole from a Part.

CHOROGRAPHY, is the Description of a Kingdom, or Province; as of *France* or *England*, *Britanny* or *Middlesex*.

TOPOGRAPHY, is only the Description; or rather the Plan, of some particular Place; as of a City; Forts, House, &c.

Goltitz considers GEOGRAPHY as either *interior* or *exterior*; but *Varenes*, more justly, divides it into *general* and *special*; or *universal* and *particular*.

General, or *universal* GEOGRAPHY, is that which considers the Earth in general, without any Regard

to particular Countries; or the Affections common to the whole Globe, as to its Figure, Magnitude, Motion, Land, Sea, &c.

Special or *particular* GEOGRAPHY, is that which considers the Constitution of the several Regions, or Countries; their Bounds, Figure, &c. with the Mountains, Forests, Mines, Waters, Plants, Animals, &c. therein; as also their Climates, Seasons, Heat, Weather, Distance from the Equator, &c. and their Inhabitants, Arts, Food, Commodities, Customs, Language, Religion, Policy, Cities, &c.

To proceed with the same Order, in this curious Treatise, I have observed in all the others, I'll begin by the general, or universal *Geography*.

The general, or universal *Geography*, considers the *Earth* as a terraqueous *Globe*, or Ball, consisting of Land and Sea.

The Figure of this *Ball*, or *Globe*, is demonstrated to be nearly spherical thus: The Moon is frequently seen eclipsed by the Shadow of the Earth; and in all Eclipses, that Shadow appears circular, what Way soever it be projected, whether towards the East, West, North, or South, howsoever its Diameter vary, according to the greater or less Distance from the *Earth*: Hence it follows, that the Shadow of the *Earth*, in all Situations, is really conical; and consequently the Body that projects it, *i. e.* the *Earth*, is nearly spherical.

The natural Cause of this Sphericity of the Globe, is, according to Sir *Isaac Newton*, the great Principle of Attraction, which the Creator has stamped on all the Matter of the Universe; whereby all Bodies, and all the Parts of Bodies mutually attract one another.

We say that the *Earth* is nearly spherical; for the Inequalities on its Surface prevent its being perfectly so. Besides that *Huygens*, and Sir *Isaac Newton* have shewn, that the *Earth* is higher and bigger under the Equator, than at the Poles; so that its Figure, nearly, is that of an oblate Spheroid, swelling out towards the equatorial Parts, and flatted or contracted towards the Poles: The Ratio of the greater Diameter to the less, *Huygens* determines to be as 578 to 577. The Reason of this Inequality is deduced from the diurnal Rotation of the *Earth* on its Axis.

This Roundness of the *Earth* is farther confirm'd, by its having been frequently sail'd round: The first Time was in the Year 1519, when *Ferd. Magellan* made the Tour of the whole Globe in 1124 Days. In the Year 1557, Sir *Francis Drake* perform'd the same in 1056 Days: In the Year 1586, Sir *Thomas Cavendish* made the same Voyage in 777 Days: *Simon Cordes* of *Rotterdam* in the Year 1590; and in the Year 1598, *Olivert Noort*, a *Hollander*, in 1077 Days: *Will. Corn. Van Schaiten*, in the Year 1615, in 749 Days: *Jac. Heremite* and *Job. Huygens*, in the Year 1623, in 802 Days: All of whom sailing continually from East to West, at length arriv'd in *Europe*, whence they set forth; and in the Course of their Voyage observed all the Phænomena, both of the Heavens and *Earth*, to correspond to, and confess this spherical Figure.

What the *Earth* loses of its Sphericity, by Mountains and Valleys, is nothing considerable; the highest Eminence being scarce equivalent to the minutest Protuberance on the Surface of a Lemon: What it loses by the swelling of the equatorial Parts, is more sensible.

Sir *Isaac Newton* makes the greatest Diameter 34 Miles bigger than the less, fixing the Ratio, as 692 to 688. If the *Earth* were in a fluid State, its Revolution round its Axis would necessarily make it put on such a Figure, by Reason the centrifugal Force being greatest towards the Equator, the Figure would there rise, and swell most: And that it should be so now, seems necessary to keep the Sea in the equinoctial Regions from overflowing the *Earth* thereabout.

In the Solidity of the *terracqueous Globe*, are imagined a *Point*, which is the Centre thereof, and four Lines, *viz.* the Diameter of the Globe, and three

Axes, one of the terrestrial Globe, one of the Zodiac, and the other of the Horizon.

The CENTRE of the *terrestrial GLOBE* is a *Point*, which we conceive in the Middle thereof; from which Point all the Right-Lines drawn to its Surface, are equal between themselves, and each form a Semi-Diameter.

The Centre of the *Globe* serves, 1. Of Foundation and Base to the Semi-Diameters. 2. It is the Centre of all the great Circles described around the Surface of the terrestrial Globe, and which divide it into two equal Parts. 3. It is esteemed, by the Vulgar, the Centre of the Universe.

The *Diameter* of the *Globe* is a right Line, drawn from one of its Extremity to the other, and which passes through its Centre. The Multiplication of the Circumference of the *Earth* by its *Diameter*, gives us the whole Extent of its Surface; and that Surface multiplied by the sixth Part of the same *Diameter*, gives us the Solidity of the Globe.

An infinite Number of *Diameters* can be drawn in the Solidity of the Globe, among which three are called Axis.

The *Diameter* which describes the Points of the North and South, is called the *Axis of the terrestrial Globe*; that which describes the Polar Circles, is called the *Axis of the Zodiac*; and the *Axis of the Horizon*, is the *Diameter* which shews the Zenith and Nadir of every Place.

The *Axis* of the *terrestrial Globe*, or its two Extremities, or Ends, mark on the Surface of the same Globe, two Points call'd *Poles*: The Vulgar imagine that round this *Axis*, not only the terrestrial Globe, but likewise the whole Universe turns.

The *Axis of the Zodiac*, by its two Extremities, describes on the Surface of the Globe the two Polar Circles; and round that *Axis* the twelve Signs of the Zodiac are imagined to make their Course.

The *Axis* of the *Horizon*, by its two Extremities, gives us the Zenith and Nadir of every Place.

On the Surface of the *Globe* are conceived ten Points, and ten Circles.

Among the *Points*, four are call'd *Cardinal*, four *Collateral*, and two *Vertical*.

The four first *Points* are call'd *Cardinal*, *i. e.* principal, because they shew the four principal Parts, or Regions of the World, *viz.* the North, South, East, and West.

The *Points* of the North and South are esteem'd fix'd, and immobile, and are the same with the Poles, which we have said to be the Extremities of the Axis of the *terrestrial Globe*. They are call'd *Poles*, from a *Greek* Word, which signifies *to turn*; because the Heavens are imagined to turn round these two Points. One of those *Poles* is call'd *Arctick*, or of the North, because of the Constellation of the *Ursa*, call'd by the *Greeks* *αρκτικός*; and by the *Latins*, *Septentrio*; from that Constellation being composed of seven Stars; under which that *Point* is mark'd on the Globes. The other *Pole* is call'd *Antarctick*, from its being diametrically opposite to the *Arctick*: We *Europeans* call it, likewise, the *Point* of the South, because it is towards the South with respect to us.

As these two Points are fix'd, they can serve for all the Parts of the terrestrial Globe; one under the Name of *Arctick*, and the other under that of *Antarctick*. And as for the Name of South, which we give to the *Antarctick*, it is only with respect to us, who are placed between the Equator and the North; because the northern Point is the southern Point, respectively to the *Point*, or antarctick Pole, and to all those who inhabit between that *Pole*, and the Equator.

The *East* and *West*, are mobile Points, which the Sun changes as often as it changes Meridians. These *Points* of the *East* and *West*, simply taken, must be understood of the Equinoxes, when Days are equal to Nights. The *East* is the Point where the Sun rises, and begins to appear by ascending on our Horizon, where

where he makes his Course on the Equator. The *West* is the *Point* where the Sun sets, and begins to disappear, in descending from our Horizon; when it rolls on the Equator.

These *Points of East and West*, though mobile, and though they be *East* and *West* respectively to one another, notwithstanding in the Chart, or Maps; of the Correspondence of the Globe with the Sphere, they are marked as fix'd at the Extremity of each Hemisphere; the *East* on the Right, and the *West* on the Left, and on the Equator.

The *Collateral Points*, are those laying between the *Cardinal Points*. Which are either *primary*, viz. those equi-distant from the two Cardinals, as *North-West*, *South-East*, &c. or *secondary*, which are again either of the *first Order*, viz. such as are equi-distant from a Cardinal, and the next *primary*, as *North-North-East*; or of the *second Order*, i. e. equidistant between a Cardinal or Primary, and first Secondary, as *North-East* by *North*.

The *primary collateral Points*, therefore, are 45° distant from the Cardinals; the first Secondaries $22^{\circ} 30'$ from the Cardinal, and next primary Collateral; and the Secondaries of the *second Order* $11^{\circ} 15'$ from a Cardinal, or first Collateral, and a second.

Some Geographers called these collateral Points, the *Summer-East*, and the *Winter-East*; the *Summer-West*, and the *Winter-West*; and called the *Summer-East* that Point where the Sun rises, and begins to appear on the Horizon, the longest Day of the Year; the *Summer-West*, that Point where the Sun sets, the same Day. The *Winter-East*, that Point where the Sun rises on the Horizon, the shortest Day of the Year; and the *Winter-West*, that Point where the Sun sets, the same Day.

These Risings and Settings of the Sun, in the longest and shortest Day of the Year, happen but when the Sun accomplishes his Course on the Tropicks; and though these four collateral *Points* be mobile, and roll always on the Tropicks, and consequently different from those which have different Meridians, they are, notwithstanding, marked as fix'd at that Place where the Tropicks are intersected by the *Colure* of the Equinoxes.

For the Use of the northern Hemisphere, i. e. of those placed between the Equator and the Arctick Pole, the *Summer-East* and *West*, are mark'd on the Tropick of Cancer, and the *Winter-East* and *West*, on that of Capricorn.

But for the Use of the meridional Hemisphere, i. e. of those situated between the Equator and the Antarctic Pole, the *Summer-East* and *West* must be placed, on the Tropick of Capricorn; and the *Winter-East* and *West*, on that of Cancer; so that the *Points* which are the *Summer-East* and *West*, at the northern Hemisphere, are the *Winter-East* and *West*, at the meridional Hemisphere; and the *Summer-East* and *West* of the meridional Hemisphere, are the *Points* of the *Winter-East* and *West* of the northern Hemisphere.

The two vertical Points, are those which we carry along with us, and which are call'd *Zenith* and *Nadir*: They are diametrically opposite to one another.

The *ZENITH* (as we have already observ'd in our Treatise of *Astronomy*) is a Point imagined over our Head; and every Time we change Place, our *Zenith* changes in Proportion.

The *NADIR*, is a Point imagined directly under our Feet, and over the Head of our Antipodes.

The four *Cardinal Points*, and the four *Collateral*, serve to let us know the Situation of Countries, with regard to one another; and compose the Rumbs of Wind.

According to the four *Cardinal Points*, the World is divided into four principal Regions; and the four Continents have borrow'd their Names from them. The ancient Continent, is call'd *Oriental*, or *Eastern*; the new, *Occidental*, or *Western*; the *Magellanick*, *Meridional*, or *Southern*; and the Arctick, *Septentrional*, or *Northern*.

The *Arctick* and *Antarctick* Poles, by their Elevation on the Horizon of a Place, discover or shew the Latitude of that Place; as I'll explain afterwards.

The *North*, is the Point on which all the northern Geographers ought to regulate their Charts, or Maps; because they put, or can put in those Maps, the *North* a-top, the *South* at Bottom, the *East* on the Right, and the *West* on the Left.

The *Zenith* and *Nadir*, serve as Poles to the Horizon; discover the Countries where the Inhabitants are reciprocally Antipodes; and fix the Meridians.

From this we'll pass to the *Ten CIRCLES*, described, likewise, on the Surface of the *Globe*; which may be consider'd in three Manners; either as great, or small Circles; or as fix'd, or mutable.

There are five *Circles* parallel between themselves; viz. the *Equator*, the two *Tropicks*, and the two *Polar Circles*: And five dissemblable from one another, and which intersect one another; viz. the *Ecliptick*, *Horizon*, *Meridian*, and the two *Colures*.

Of these ten Circles, six are great; and four small. The four great Circles are the *Equator*, *Ecliptick*, *Horizon*, *Meridian*, and the two *Colures*. The four small, are the two *Tropicks*, and the two *Polar Circles*.

Though these ten Circles be marked as fix'd in the Maps of the terrestrial Globe, the *Horizon* and the *Meridian*, are mutable, according to the Diversity of Places we change.

The eight others, viz. the *Equator*, the two *Tropicks*, the two *Polar Circles*, the *Ecliptick*, and the two *Colures* are fix'd for all the Inhabitants of the Earth, and are always found in the same Place.

The *great Circles* are all equal in Bigness, have all the same Centre with the *terrestrial Globe*; and divide the said Globe into two equal Parts, intersecting likewise one another, into two equal Parts.

The *small Circles* are unequal, and have not so much Circuit as the great ones, because they have each a Centre different from that of the *terrestrial Globe*; which, therefore, they cut into two unequal Parts.

We must next consider these ten Circles, one in every Particular; beginning with the first of the great ones, which is the *Equator*.

The *EQUATOR*, is a great Circle, equally distant from the two Poles of the World, or having the same Poles with those of the World. It receives the Name of *Equator*, of *Equinoctial*, and of the *Line* according to its different Uses. It is called the *Equator*, because it divides or cuts the *terrestrial Globe* into two equal Parts: *Equinoctial*; by reason when the Sun is therein, the Days and Nights are equal; and *Line*, by way of Excellence, for its being the first and principal of all the Circles, described on the *terrestrial Globe*. — The Uses of the *Equator* are several:

1. It divides the *terrestrial Globe* into two equal Parts, and those Parts are call'd Hemispheres; the one whereof is call'd the *Northern Hemisphere*, and the other the *Southern Hemisphere*.

2. It marks the true *East* and *West*, call'd *Equinoxes*, in all the Regions of the Globe.

3. It serves for a Foundation and Base, to find and reckon the Latitude of all that is on the Surface of the Globe, its being the first and principal of the *Parallels of Latitudes*; that *Latitude* being the Distance from the *Equator* to the Place proposed, in going forwards towards the one or other Poles.

4. It marks on the *Ecliptick* the two Points, where the *Equinoxes* are made, i. e. that the Sun passing there, renders the Days and Nights equal in all the Parts of the *terrestrial Globe*: To all that is between the *Equator* and the *Poles*, it divides the 24 Hours of the natural Day, into 12 Hours of Day, and 12 Hours of Night; but begins, at the same Time, under the Poles, a Day and a Night of six Months; so that when the Day of six Months begins under the *Arctick* Pole, the Night of six Months begins at the same Time under the *Antarctick*; and, on the contrary, when the Night after the Days of six Months begins under the *Arctick*, the Days of six Months begins under the *Antarctick*.

5. Those

3. Those who inhabit under the *Equator*, have the Day equal to the Night, not only at the Time of the Equinoxes, but likewise all the Days of the Year, *i. e.* perpetually, because their Horizon cuts into equal Parts all the Circles which the Sun makes every Day of the Year. All others have their Days unequal; which, notwithstanding, those who approach nearer the Equator, have their Days and Nights more equal than those who are at a greater Distance from it.

6. The Sun, by Means of the same Points of the Equinoxes, gives to all Parts of the Globe, the Spring and Autumn, but at different Times; for while it gives the *Spring* to the northern Hemisphere, it gives, at the same Time, the *Autumn* to the southern Hemisphere; and *vice versa*.

7. On its whole Circle, the natural Day of 24 Hours is determined; since the Sun makes upon it, 15 Degrees every Hour; which reckoned 24 Times, makes up the 360 Degrees, into which that Circle is divided. Hence we have frequent Occasion for the Conversion of Degrees of the *Equator* into Time; and again, for the Re-conversion of Parts of Time into Parts of the *Equator*. For Performance whereof, I subjoin the following Table; wherein are exhibited the Arches of the Equator, which pass the Meridian in the several Hours, Minutes, &c. of equated, or mean Time.

Conversion of Parts of the Equator into Time, and vice versa.							
Deg. of Equat	Hours	I	Hours	Deg. of Equat	Hour Min.	Deg. of Equat	I
Min.	I	II			Second		II
Second	II	III			Third		III
Third	III	IV			Fourth		IV
I	0	4	I	15	I	0	15
2	0	8	2	30	2	0	30
3	0	12	3	45	3	0	45
4	0	16	4	60	4	1	0
5	0	20	5	75	5	1	15
10	0	40	6	90	6	1	30
15	1	0	9	135	10	2	30
30	2	0	12	180	20	5	0
60	4	0	15	225	30	7	30
90	6	0	18	270	40	10	0
180	12	0	21	315	50	12	30
360	24	0	24	360	60	15	0

The Use of the Table is obvious; suppose, *e. gr.* it were required to turn $19^{\circ} 13' 7''$ of the *Equator* into Time: Against 15 Degrees in the first Column, we have $1^h 0' 00''$; against 4 Degrees, we have $16' 0''$; against 10 Minutes $40''$; against 3 Minutes, $12' 0''$; against 5 Seconds, we have $0' 20''$; and against 2 Seconds, $8''$; which added together, give $1^h 16' 52'' 28''$.

Again, suppose it were required to find how many Degrees, Minutes, &c. of the *Equator*, answer to 23 Hours 25 Min. 17 Sec. and 9 Thirds: Against 21^h in the fourth Column of the Table you have 315° ; against 2 Hours, 30° ; against 20 Sec. 5° ; against 10 Sec. $2' 30''$; against 5 Sec. $1' 15'' 0''$; which added together, give $351^{\circ} 19' 17'' 15''$.

8. In cutting the Zodiac, into two equal Parts, it parts the northern Signs from the southern, and divides the long Days from the short ones.

9. It serves to the Construction of Sun-Dials.

10. It is esteem'd, by Astronomers, the Rule and Measure of the *Primum Mobile*, and serves to several other Uses.

The ZODIACK, is one of the great Circles, and the only one which has any Width. This Circle is call'd *Zodiack*, *Signifer*, or Sign-Bearer, oblique Circle, and *Ecliptick*.

1. It is call'd *Zodiack* by the *Greeks*, either because most of the Constellations it contains, have borrow'd

the Name of some Animal, and are represented under their Form or Figure; or because the Sun and the Moon rolling through that Circle, help to the Production of all Things.

2. It is called *Signifer*, by the *Latins*, because the twelve Constellations it contains are call'd Signs.

3. Some call it the *oblique Circle*, by reason of its Obliquity, with respect to the Equator, by which it is cut into oblique Angles.

4. The Eclipses of the Sun and Moon, which happen in it, have given it the Name of *Ecliptick*, *i. e.* the *Line of the Eclipses*; though Geographers mark but the *Ecliptick*, which is the Line represented in the Middle of the Zodiac; and describe that Line on the terrestrial Globe, and the general Maps of the World; between the two Tropicks.

The *Ecliptick*, like the *Zodiack*, is divided into 12 Parts, and each Part subdivided into 30, called Degrees, which together make up 360 Degrees, into which the *Ecliptick* is divided.

The Uses of the *Ecliptick*, are: 1. It marks, by each Degree, very near the Course which the Sun makes every Day; by each of the twelve Parts, it shews the Sign and the Month; by the 30 Degrees of each Sign, the 30 Days, which the Sun takes to run through each Sign; by the 360 Degrees, it gives us the annual Progress of the Sun, which is of 365 Days 6 Hours, or thereabout, which 6 Hours, every fourth Year, makes up one Day; which is added to that fourth Year, which Year is of 366 Days, and is call'd *Bissextile*, as we have observ'd in our Treatise of *Astronomy*.

2. Each twelfth Degree of the *Ecliptick* marks the diurnal Progress of the Moon.

3. The *Ecliptick* being divided into two equal Parts by the Equator, that Part which advances towards the Arctick Pole, marks the long Days of the northern Hemisphere, and the short Days of the southern Hemisphere; the other Part, which advances towards the Antarctic Pole, marks the short Days of the northern Hemisphere, and the long ones of the southern Hemisphere.

4. The *Ecliptick* is divided into four Parts by the *Colures*, marks three Signs for each of the four Seasons of the Year. The northern Hemisphere has for its Spring, *Aries*, *Taurus*, and *Gemini*; and for its Summer, *Cancer*, *Leo*, and *Virgo*; for its Autumn, *Libra*, *Scorpio*, and *Sagittarius*; and for its Winter, *Capricorn*, *Aquarius*, and *Pisces*. On the contrary, these last Signs make the Summer of the meridional, or western Hemisphere: *Libra*, *Scorpio*, and *Sagittarius*, makes its Autumn; *Cancer*, *Leo*, and *Virgo*, its Winter; and *Aries*, *Taurus*, and *Gemini*, its Spring: So that when an Hemisphere has its Spring, the other opposite to it has its Autumn; and when one has its Summer, the other has its Winter.

5. The *Ecliptick* cuts the terrestrial Globe into two equal Parts, but obliquely, with respect to the Equator and the Poles.

6. It describes by its Poles the Polar Circles.

7. It comprehends, by its Obliquity, all that Space of the terrestrial Globe, call'd the *Torrid Zone*.

The TROPICKS, are two among the small Circles, described by the Sun at divers Times, when it passes through the two Points of *Cancer* and of *Capricorn*. These two Circles are equal and parallel to one another, and to the Equator, from which they are equally distant of $23\frac{1}{2}^{\circ}$ Degrees, or thereabouts. They are call'd *Tropicks*, of the *Greek Tropos*, *Return*; because the Sun being arrived at either of them two, it retrogrades, and returns towards the Equator.

The *Tropick* which is towards the Arctick Pole, or the North, is call'd the *Tropick of Cancer*; because that Circle is form'd at the first Point of *Cancer*; and *Northern*, because in the northern Hemisphere; of which Hemisphere it is likewise the Summer's *Tropick*, as it is, at the same Time, the Winter's *Tropick* of the southern Hemisphere.

The *Tropick* which advances towards the Antarctic Pole, is call'd the *Tropick of Capricorn*, because

of the first Point of that Sign in which it is form'd; it is also call'd *Meridional*, or *Southern*, but only with respect to our northern Hemisphere: And also the Winter's Tropick, but with respect to us only, since, at the same Time, he is the Summer's Tropick of the Hemisphere, which we call *Meridional*.

These two Circles are also call'd *Solstices*, as if one would say *Station of the Sun*, from the Sun's advancing so slow, when it approaches or departs from the Tropicks, that it seems to pass for some Time thro' the same Places; and that neither the Days, nor the Nights, diminish or increase, but remain for several Days in the same State.

The *Uses* of the Tropicks, are: 1. That they encompass a certain Space, beyond which the Sun never goes; and within which, it every Day makes its Course by a spiral Line; advancing now towards one, and then towards the other Tropick.

2. They mark on the *Ecliptick* the two Points where the *Solstices* are made; which shews us the longest and shortest Day of the Year.

3. Their Distance from the Equator marks the greatest Declination of the Sun towards the one, or the other Pole; which is not always equal, but is ordinarily placed at 33 Degrees, 30 Minutes.

4. They inclose the *Torrid Zone*, and separate it from the *Temperate*.

The *Polar CIRCLES*, are two small Circles, which the Poles of the Zodiack, or of the *Ecliptick*, describe round the Poles of the World: They are equal and parallel to one another, and also to the two Tropicks and to the Equator; and are as much distant from the Poles of the World, as the Tropicks are from the Equator. That round the Arctic Pole, is call'd the *Circle of the Arctic* or *Northern Pole*; and the other round the Antarctic Pole, is call'd by its Name.

The *Uses* of the *Polar Circles*, are: 1. To shew us the Poles of the Zodiack, or *Ecliptick*.

2. They inclose the *Frigid*, or *Glacial Zones*, and separate them from the *Temperate*.

2. They inclose the great Climates, where the long Days, and long Nights of several Months, reign, and part them from the little Climates.

The *COLURES*, are two great Circles, which intersect each other at right Angles in the two Poles of the World. One is call'd the *Colure of the Equinoxes*, because it cuts the Equator and the *Ecliptick* in the first Points of *Aries* and *Libra*, where the Equinoxes happen, or are made. The other the *Colure of the Solstices*, from its cutting the *Ecliptick*, and the Tropicks, where the *Solstices* happen, at the first Point of *Cancer*, and at the first of *Capricorn*.

As these two Circles are whole Meridians, the *Colure of the Equinoxes* is marked on the terrestrial Globe, and in the Map of the Correspondence of the Globe with the Sphere, by the first Meridian, which is found to be the first, and the 180th Degree of Longitude, which environs our western Hemisphere; the *Colure of the Solstices* by the 90th Degree of Longitude, which is in the Middle of our eastern Hemisphere; and the 170th, which is in the Middle of the other, or western Hemisphere. Thus these two *Colures* cut the *Ecliptick* into four equal Parts, and mark the four Points where the four Seasons of the Year begin.

Note, That the Name *Colure*, comes from the Greek $\kappa\omega\lambda\upsilon\omega$, to cut, and $\nu\epsilon\upsilon\tau\alpha$, Tail, so that $\kappa\omega\lambda\upsilon\epsilon\upsilon\tau\alpha$ signifies *Cut-Tail*. These Circles are thus called, because that which cuts the *Ecliptick* where it meets with the Equator, and that which cuts the same *Ecliptick* where it meets with the Tropicks, have, on both Sides, very acute Angles, which represent Tails.

The *Uses* of the *Colures*, are: 1. That they both cut the *Ecliptick* into four equal Parts, and mark there the Points, where the Equinoxes of the Spring and Autumn, and the Summer and Winter Solstices happen; which are the Beginning of the four Seasons of the Year.

For the northern Hemisphere, the *Colure of the Equinoxes* mark the *Equinox*, or Beginning of the Spring, at the first Point of *Aries*, towards the 21st of *March*, New Style, or the 10th of the same Month, Old Style; the *Equinox*, or Beginning of the Autumn, at the first Point of *Libra*, about the 21st of *September*, New Style, or the 10th of the same Month, Old Style. The *Colure of the Solstices*, mark the *Solstice*, or Beginning of Summer, at the first Point of *Cancer*, about the 21st of *June*, New Style, or the 10th of the same Month, Old Style; the *Solstice*, or Beginning of Winter at the first Point of *Capricorn*, about the 21st of *December*, New Style, or 10th of the same Month, Old Style.

But for the opposite Hemisphere, which we call *Meridional*, or *Southern*, the *Colure of the Solstices*, marks the first Point of *Capricorn*, for the *Solstice*, or Beginning of Summer; the first Point of *Cancer*, for the *Solstice*, or Beginning of Winter. The *Colure of the Equinoxes* marks the first Point of *Libra* for the Equinox, or Beginning of Spring; and the first Point of *Aries* for the Equinox, or Beginning of Autumn; those two Hemispheres having always the Seasons contrary, at the same Time.

The *HORIZON*, from the Greek $\omega\pi\epsilon\iota\zeta\omega$, to finish, or terminate, is a great Circle, dividing the World into two Parts or Hemispheres; the one upper, or visible; the other lower, and invisible.

There are two Sorts of *Horizon*, one *sensible*, and the other *rational*. We call *sensible Horizon*, the Circle which terminates what our Sight, being free on all Sides, or meeting with no Opposition, in a level Champagne, can discover on the Earth; and that *Horizon* is but a small Circle which divides the visible Part of the Sphere, from the Invisible.

The *rational Horizon*, is a great Circle, whose Plane passes through the Centre of the Earth, and whose Poles are the Zenith and Nadir, round which it is described, and which divide the Heavens, and the terrestrial Globe into two Hemispheres.

The *Horizon* changes, as often as we change Places.

Though there be as many *Horizons*, as there are Zeniths, i. e. different Places on the Earth; there are notwithstanding but three Sorts of *Horizons*, viz. the *right*, *oblique*, and *parallel Horizon*.

1. The *Horizon* is *right*, when it has its Zenith in the Equator, when it passes through the four cardinal Points, and cuts the Equator into right Angles.

2. That's an *oblique Horizon*, whose Zenith is between the Equator and one of the Poles, and which cuts the Equator into oblique Angles.

3. That *Horizon* is *parallel*, which has for Zenith one of the Poles, and the Equator for *Horizontal Circle*.

The *right Horizon*, is only for those who inhabit under the Equator. The *parallel Horizon*, for those who are directly under the Poles. But the *oblique Horizon* is for all those who inhabit between the Equator, and one and the other Pole.

The *Uses* of the *Horizon*, are: 1. That the *rational Horizon*, of every Person, serves to divide the terrestrial Globe into two Hemispheres; one whereof is call'd *superior*, and the other *inferior*.

2. The *Horizon* shews us the Length of the artificial Day, which is the Time the Sun takes to accomplish its Course on our *Horizon*; and the Length of the artificial Night, which is the Time the Sun is hidden under our *Horizon*. Those who have a *right Horizon*, have a perpetual Equinox, having always the artificial Day equal with the Night; because the Sun is every Day twelve Hours on their *Horizon*, and twelve Hours under it. Those who have their *Horizon parallel*, have one Day six Months long, and one Night of the same Length; the Sun being six Months on their *Horizon*, and six Months under it. Those who have an *oblique Horizon*, have the Equinoxes but twice a Year; and all the other Days and Nights unequal, in Proportion of their Distance from the Equator, and the Elevation of the Pole, on their *Horizon*. Between the Equator and the Polar Circles,

the Days increase above 12 Hours to 24; because those who inhabit under those Circles, have, during 24 Hours, the Sun on their Horizon. Between the Polar Circles and the Poles, the Days increase in proportion as the Sun is on their Horizon, the Day grows a Week, one, two, three, four, five, and at last six Months long under the Poles.

3. The *Horizon* serves for the Construction of the Compass, for Navigation, and of Dials, because the Division of the Compass is nothing else but the Division of the *Horizon*.

4. The *Horizon* shews the Height of the Pole, and marks, at the same Time, the Latitude, which is the Distance of the Equator, because the Distance of the Equator to our Zenith, is equal to the Distance which is between our Horizon and the Pole.

The *MERIDIAN* is a great Circle, which passes thro' the Poles of the World and our Zenith and Nadir, and cuts the terrestrial Globe into two Hemispheres, viz. the Eastern and Western. This Circle is called *Meridian*, because the Sun passing into that Circle, it is Noon for all those who are in that Part of that Circle, exposed to the Sun, and Midnight for all those who are in the other Part of the same Circle opposite to it.

As the *Meridian* is determined by the Zenith, as many can be imagined as vertical Points from East to West.

Of that great Number of *Meridians*, Astronomers retain but 180, but which are reckoned by half or simple *Meridians*, to the Number of 360.

Geographers mark on the Equator the 360 simple *Meridians*, the Lines whereof they describe, to avoid Confusion, but thro' every tenth Degree of the Equator, or thro' every tenth Degree of Longitude.

The first *Meridian*, having not been yet determined by Astronomers, its Position is left arbitrary.

The ancient Geographers having considered that the *Meridian* serves to measure the Length of the Earth, have given it the Name of Longitude, and have placed the first *Meridian* at the occidental, or western Extremity of our Continent, whence they have began to reckon from West to East the 360 *Meridians* or Longitudes, which I'll explain more particularly in the Division of the Surface of the terrestrial Globe, into Longitude and Latitude.

The Uses of the *Meridian* are, — 1. That every whole *Meridian* serves to divide the terrestrial Globe into two Hemispheres, Eastern and Western, those divided by the first *Meridian* being preferred by Geographers to represent in Plane the terrestrial Globe.

2. The *Meridian* shews us, at the same Time, the Height of the Pole, and the Distance of the Equator, or Latitude; because the Arch of the *Meridian*, comprised between the Equator and the Zenith, and the Arch of the same *Meridian*, inclosed between the Horizon and the Poles, are equal.

3. It marks Noon and Midnight to all those who are within its Circle.

4. It begins the natural astronomical Day by Noon, and the civil Day by Midnight.

5. It divides the artificial Day into two equal Parts.

6. The *Meridian* of each Region, shews which Countries have Noon before, or after, or at the same Time.

7. In reckoning by every fifteenth *Meridian*, we discover at the same Time the Hour of every Country.

8. The *Meridians* serve to reckon the Latitude, that Latitude being reckoned along one *Meridian*, from the Equator advancing towards the one or the other Pole.

Note, That the *Points*, *Lines*, and *Circles* we have described in the Solidity, and on the Surface of the Globe, furnish the Geographers with seven Manners of dividing the Surface of the terrestrial Globe, with Regard to the Heavens. 1. Into Regions. 2. Into Hemispheres. 3. Into Zones. 4. By Shadows. 5. By Positions. 6. By Climates. 7. According to the *Longitude* and *Latitude*; and

an eighth Division, as well of the Surface, as of the Solidity of the Globe by Measures. I'll begin by the Division of the Surface of the terrestrial Globe into Regions; and proceed thro' all the other Divisions, every one in Order.

With Regard to the four cardinal Points, viz. the *North*, *South*, *East* and *West*, the Surface of each horizontal Hemisphere, is divided into four Regions, viz. *Northern*, *Southern*, *Eastern*, and *Western*; having Regard to the Zenith which is the Centre of that Division. This Division serves to compare the respective Situation of Countries with one another, and makes one of the most essential Parts of *Geography*. So that one Country considered with Regard to the neighbouring one, is *Northern* to one of them, and *Southern* to the other; and its Situation is *Western* to that which is *Eastward* of it, and *Eastern* to that which is *Westward*. France, for Example, is *Northern* with Regard to Spain, *Southern* with Respect to England, *Western* with Respect to Germany, and at the same Time, *Eastern* with Respect to Canada.

The *Europeans*, considering the *Continents* according as they are situated, with Regard to them, call their *Continent* which is the antient, the *Eastern Continent*; have given the Name of *Western* to the *New Continent*, or *America*; have called *Southern* the *Magellanick Continent*, and call *Northern* that *Continent* which is towards the *North*. Which notwithstanding the *antient Continent*, and the *new*, are respectively at the *East* and *West* of one another; likewise the *Northern* and *Magellanick*, are reciprocally *Southern*.

Therefore the *Continents* considered as they are situated with Respect to *Chili*, *America* will be the *Eastern Continent*; the antient will be the *Western*; the *Septentrional*, or *Northern*, will be the *Southern*; but the *Magellanick* will not be reciprocally the *Northern*, since its Pole cannot be called its North, but only its Pole; the Name *North* being particular to our Pole, which we call *Arctic*; therefore the *Magellanick Continent*, cannot be called otherwise than *Antarctic*, or *anti-northern*, as opposite to the *Arctic*; or *Northern*, till its Pole be capable to communicate to it, the Name which in Process of Time it may borrow from some neighbouring Constellations.

The four great Regions of the Horizon, are subdivided into several less, which are the same Thing with the *Winds*; for the Distribution thereof, the four cardinal Points serve as Foundation and Rule.

The *Winds* are divided with Respect to the Points of the Horizon, from which they blow, into *Cardinal* and *Collateral*.

The *Cardinal Winds*, are those blowing from the four Cardinal Points, *East*, *West*, *North*, and *South*.

Collateral Winds, are the intermediate *Winds*, between two *Cardinal Winds*. The Number of these is infinite, as the Points from which they blow are, but only a few of them are considered in Practice, i. e. only a few of them have their distinguishing Names.

The antient *Greeks*, at first, only used the four cardinal ones, at length they took in four more. *Vitruvius* gives us a Table of twenty, besides the Cardinals in Use among the *Romans*.

The *Moderns*, as their Navigation is much more modern than the Antients, have given Names to 28 collateral ones; which they range into *primary* and *secondary*. And subdivide the *secondary* into those of the first and second Order.

The *English* Names of the primary collateral *Winds*, are compounded of the Names of the cardinal ones, *North* and *South* being still prefixed.

The Names of the secondary collateral *Winds* of the first Order, are compounded of the Names of the Cardinals, and the adjacent primary one. — Those of the second Order are compounded of the Names of the Cardinal, or the next adjacent Primary; and the next Cardinal, with the Addition of the Word (*by*). The *Latins* have distinct Names for each, all which are expressed in the following Table.

Names of the Winds.		Distances	
English.	Latin and Greek.	from the N.	
1. North.	Septentrio, or Boreas.	0°	0'
2. North by East.	Hyperboreas. Hypaquilo. Gallicus.	11.	15.
3. North-North-East.	Aquilo.	22.	30.
4. North-East by North.	Mesoboreas.	33.	45.
5. North-East.	Arctapeliotes. Baropeliotes. Græcus.	45.	
6. North-East by East.	Hypocæfias.	56.	15.
7. East-North-East.	Cæfias, Hellespon- tius.	67.	30.
8. East by North.	Mefocafias. Carbas.	78.	45.
		from the E.	
9. East.	Solanus, Subsolanus, Apeliotes.	0°	0'
10. East by South.	Hypeurus, or Hyper- curus.	11.	15.
11. East-South-East.	Eurus, or Volturnus.	22.	30.
12. South-East by East.	Mefcurus.	33.	45.
13. South-East.	Notapeliotes, Euro-au- fter.	45.	
14. South-East by South.	Hypophœnix.	56.	15.
15. South-South-East.	Phoenix, Phœnicias, Leuco-notus, Gan- geticus.	67.	30.
16. South by East.	Mefophanx.	78.	45.
		from the S.	
17. South.	Auster, Notus, Meri- dies.	0°	0'
18. South by West.	Hypolibonotus, Alfa- nus.	11.	15.
19. South-South-West.	Libonotus, Austro-A- fricus.	22.	30.
20. South-West by South.	Mofolibonotus.	33.	45.
21. South-West.	Noto-Zephyrus, Noto-Libicus, Africus.	45.	
22. South-West by West.	Hypolibis. Hypafricus. Subvesperus.	56.	15.
23. West-South-West.	Libis.	67.	30.
24. West by South.	Mefolibis. Mefophyrus.	78.	45.
		from the W.	
25. West.	Zephyrus, Favarius, Occidens.	0°	0'
26. West by North.	Hypargestes. Hypocorus.	11.	15.
27. West-North-West.	Argestes, Caurus, Co- rus-Japyx.	22.	30.
28. North West by West.	Mefargestes, Mefcorus.	33.	45.
29. North-West.	Zephyro-boreas, Boroli- bycus.	45.	
30. North West by North.	Hypocircius, Sicrem.	56.	15.
31. North-North-West.	Circius, Thrafcias.	67.	30.
32. North by West.	Mefocircius.	78.	45.

From this we'll pass to the Division of the terrestrial Globe into several Sorts of Hemispheres.

The terrestrial Globe is divided into two Hemispheres, by each of the six great Circles; but as the Circles of the Colures are Meridians, and the Hemisphere made by the Ecliptick, are of no Use but in Astronomy, Geographers esteem but the Hemispheres divided by the Equator, Horizon, and Meridian.

The Equator divides the terrestrial Globe into two Hemispheres, viz. Northern and Southern, with regard to us; for if their Situation be well consider'd, they are respectively Southern to one another; therefore they are more properly call'd *Arctick*, and *Antarctick*.

The Globe is divided by the Horizon, into two Hemispheres, *superior* and *inferior*; the *superior* is that to which the Zenith serves as Pole, i. e. which is towards us; and the *inferior*, that to which the Nadir serves as Pole, and which is under us; therefore that which is inferior to us, is superior to our Antipodes; and that which is superior to us, is, on the contrary, inferior to them.

Each entire *Meridian* divides the Globe into two Hemispheres, one whereof is call'd *Eastern*, and the other *Western*; which must be understood of that Part of the *Meridian* of our Zenith; and not of the other half of the *Meridian*.

Of all these different Sorts of Divisions of Hemispheres, there is none fixed and immutable but that of the Equator; that made by the *Horizon* changes at every Place; and the Division made by the *Meridian* is the same, since it can be as often multiplied as the Meridians.

Geographers, to represent the Surface of the terrestrial Globe in Plane, prefer the *Hemispheres* divided by the first *Meridian*, because each Hemisphere, containing almost a whole Continent, of those that are known, the geographical Divisions are thereby made with a better Method.

The two *Tropicks*, and the two *Polar Circles*, divide the Surface of the terrestrial Globe into five Parts; call'd *ZONES*, from the Greek ζών, *Girdle*; these *ZONES* receive their Name from the Quality of the Temperature, to which their Situation is subject, according to the different Degrees of Heat and Cold, which the Sun gives them, by its Approaches, and its Distance, which reduce them to three Sorts of *ZONES*, which make five, a *Torrid Zone*, two *Temperate*, and two *Frigid*.

The *Torrid Zone*, is in the Middle of all the others; the *Frigid* keep the two Extremities; and the *Temperate* take up what is between the *Torrid* and the *Frigid* on either Side.

The *Torrid Zone* is terminated by the two *Tropicks*; its Breadth therefore is 46 Deg. 58 Minutes. The Equator running thro' the Middle of it, divides it into two equal Parts. The Antients imagined the *Torrid Zone* uninhabitable.

The *Temperate ZONES*, are contained between the *Tropicks*, and *Polar Circles*; that between the *Tropick* of Cancer and the *Arctick Pole*, is call'd *Northern*; and the other, situated between the *Tropick* of Capricorn, and the *Antarctick Pole*, is call'd *Southern*, with regard to us. These *ZONES* are call'd *Temperate*, because being situated between the *Torrid* and the *Frigid*, they enjoy a temperate Air, particularly towards the Middle of that *Zone*, its Extremities participating of the Excess of Heat or Cold, in Proportion as they approach nearer the *Torrid* or *Frigid ZONES*.

The *Frigid ZONES*, are between the *Polar Circles* and the *Poles*, or rather terminated the one by the *Antarctick*, and the other by the *Arctick Circle*. They are call'd *frigid*, because during the greatest Part of the Year there is felt there an excessive Cold, and all is frozen, when the Sun appears but little, or not at all on their Horizon.

The Antients have also imagined, that the *Frigid ZONES*, were uninhabitable, because of the excessive Cold, and continual Ice. But Experience has convinced us that the *Frigid ZONES* are not entirely Desert; and that in the *Torrid Zone* the Heat is not so excessive under the Equator, and the neighbouring Places, where the Sun only passes as it is towards the *Tropicks*, near which the Sun making its Course, for several Days successively, causes an almost intolerable Heat; when as throughout almost the whole *Torrid Zone*, the Mountains in some Places, the long Nights, the Rain, and great Dews, cool sufficiently to render the Earth not only inhabitable, but likewise so fertile, that it gives in several Places two Harvests in a Year, produces with little Culture, all Sorts of Spices and Drugs, furnishes alone a greater Quantity of perfect Metals, of precious Stones and Pearls, than all the other *ZONES* together. And the Deserts found in it, as in *Africa*, are rather a Proof that the Soil is sterile of its Nature, then rendered such by the Heat of the Sun; since such Deserts are found in the Middle of the *Temperate Zone*; and in that Part of *Africa* which is in the *Torrid Zone*, there are Places extremely fertile; that all the Countries and Isles of *Asia*, situated in that *Zone*, abound in all Things; and what we know of *America* in that

that *Zone*, is of the same Nature.

The *Zones* may also be considered as great and small; there are three great *Zones*, viz. the *Torrid* and the two *Temperate*; and two small ones, viz. the two *Frigids*.

The *Zones* have different Length and Breadth. The Breadth of the *Torrid Zone* is 46 Degrees 58 Minutes; that of each of the *Temperates*, 43 Degrees 2 Minutes, and that of each of the *Frigids*, 23 Degrees and about 30 Minutes.

If we reckon the Degrees of Latitude, each at 25 common Leagues of *France*, the *Torrid Zone* is found to have 1175 Leagues in Breadth; the *Temperate Zones*, each 1075; and the *Frigids* have each but 587 Leagues and a half in Breadth.

The Length of the *Zones*, or rather their Circuit, is also very different, though they have all the same Number of 60 Degrees of Longitude; for as the Degrees diminish in Proportion of their Distance from the Equator, and of their Neighbourhood to the Poles, under which they become a *Point*; likewise the Circuit of the *Zones* diminishes in Proportion, according to the Latitudes under which the *Zones* are situated.

The *Torrid Zone* has 9000 common *French* Leagues of Circuit under the Equator, which is its greater Extent; and a little more than 8250 Leagues in its Extremities under the Tropicks.

The Circuit under the Tropicks is the greater of the *Temperate Zones*, having each in their Middle, which is the 45 Degrees, about 6350, and in their Extremities under the Polar Circles about 3575 Leagues.

These *Polar Circles* make the greater Circuit of each of the *Frigid Zones*, the Middle whereof is but about 1850 Leagues; and their Extremity under the Poles, nothing else but a *Point*.

None of the *Zones* is entirely known; tho' the Northern *Temperate* and the *Torrid* are more known than the others; and nothing is known of the Southern but what belongs of it to our Continent, and to *America*. The Northern *Frigid Zone* has some Isles, and some Coasts known; but for the *Frigid Zone* *Antarctick*, which we call *Meridional*, it is entirely unknown to us.

Of the three great *Zones*, the Northern, *Temperate*, seems to have once more Land than the *Torrid*, and the *Torrid* much more than the Southern.

Note, That our next Division of the Terrestrial Globe is by *Shadows*.

The different Situations of the *Zones* have given Occasion to divide the Inhabitants of the Surface of the Globe, according to the Diversity of the Shadow of those *Zones*. This Diversity is taken either at Noon, or from the whole Course of the *Shadow*.

The Antients having discovered, that the *Shadow* turned round the Inhabitants of the *Frigid Zones*, when the Sun gives them continual Days; that the Inhabitants of the *Temperate Zones*, had always the *Shadow* turned on the same Side at Noon; those of the Northern, towards the *Arctick Pole*; those of the Southern, towards the *Antarctick*; and that the Inhabitants of the *Torrid Zone* had always their Meridian *Shadow*, six Months towards one of the Poles, and six Months towards the other: They have called the Inhabitants of the *Frigid Zones*, *Periscians*, i. e. *shadowed round*; the Inhabitants of the *Temperate Zones*, *Heteroscians*, who have but one or the other of the two *Shadows*; and the Inhabitants of the *Torrid Zone*, *Amphiscians*, i. e. who have both *Shadows*.

Reason and Experience have discovered since, that the Inhabitants of the *Torrid Zone* are *Asicians*, i. e. without a *Shadow* at Noon, when the Sun passes perpendicularly on their Zenith; that when it is no more on their Head, the *Asicians* who are under the Tropicks, have never their *Shadow* but of one Side; and that the other *Asicians* have their *Meridian Shadow*, sometimes on one side, and sometimes on the other.

Therefore the Division of the Inhabitants of the Earth, according to the Diversity of *Shadows*, is more

exactly made into *Periscians*, *Heteroscians*, and *Asicians*; who are subdivided into *Asicians Heteroscians*, and *Asicians Amphiscians*.

The *Periscians*, or Inhabitants of the *Frigid Zones*, can be considered of three Sorts: 1. Those who live under the Poles are always *Periscians*, i. e. their *Shadow* turns always round them, during the six Months the Sun shines upon them continually. 2. Those who dwell under the Polar Circles are *Periscians*, but during a natural Day, or 24 Hours, which is their longest Day. 3. And the others are *Periscians* for several Days, or several Months, according as they are near, or distant from the Pole. Those under the Poles have the Year divided into two continued Parts, i. e. a Day of six Months, and a Night of six Months, and generally all *Periscians* have but a very moderate Summer, and a very cold Winter.

The *Heteroscians*, or Inhabitants of the *Temperate Zones*, have 1. Always their *Meridian Shadow* towards one of the Poles, viz. those of the Northern, towards the *Arctick Pole*, and those of the Southern towards the *Antarctick*. And, 2. Always their Days unequal to their Nights, except the two Days of the Equinoxes.

The *Asicians*, or Inhabitants of the *Torrid Zones*, are of three Sorts: 1. Those who inhabit directly under the Equator, are every Year twice *Asicians*, or without *Shadow*, and all the rest of the Year *Amphiscians*, and have one or the other of the two *Meridian Shadows*, according to the Seasons, having two Summers and two Winters, two Springs and two Autumns.

Those who dwell between the Equator and the Tropicks, are likewise twice a Year *Asicians*, and the rest of the Year *Amphiscians*; among whom those who are in the Neighbourhood of the Equator, have also two Summers and two Winters; but which terminate in a Summer and Winter, in Proportion as they approach the Tropicks; and are sensible of the Equality of the Days and Nights, the more they approach the Equator.

Those who inhabit under the Tropicks are *Asicians*, and without a *Shadow* at Noon, but the Day of the Solstices, and *Heteroscians* all the rest of the Year; their Meridian *Shadow* never going but on one Side, and they have but one Summer and one Winter.

Therefore these three Sorts of *Asicians*, *Heteroscians*, and the three Sorts of *Periscians*, give us seven Sorts of Habitations, according to the *Shadows* on the Surface of the Earth.

Having thus divided the Surface of the Terrestrial Globe into *Zones*, and considered the Inhabitants according to the Diversity of their *Shadows*, we can, besides, consider the same Inhabitants, as *Periœcians*, *Antœcians*, and *Antipodes*, Names taken from the different Reports they have in their Situation, with regard to the same Circles, Parallels, and Meridians, or opposite, under which they inhabit.

PERIœCIANS, are such Inhabitants of the Globe as have the same Latitudes, but opposite Longitudes: or live under the same Parallel, and the same Meridian, but in different Semi-Circles of that Meridian, or opposite Points of the Parallel.

ANTœCIANS, are those Inhabitants of the Globe who live under the same Meridian, and at the same Distance from the Equator; the one towards the North, and the other to the South. Hence the *Antœcians* have the same Longitude and the same Latitude, only of a different Denomination, they lye in the same Demi-circle of the Meridian, but in opposite Parallels.

ANTIPODES, are such Inhabitants of the Earth as live diametrically opposite to one another. The *Antipodes* have the same Degree of Heat and Cold, the same Length of Night and Day; but at contrary Times; it being Midnight with one, when it is Noon with the other; and the longest Day with one, when shortest with the other.

The Inhabitants under the Poles have no *Periœcians*, but they are, at the same Time, *Antœcians*, and *Antipodes*.

Those

Those who live under the Equator have no *Antæcians*, but the *Periæcians* are there, mean while *Antipodes*.

Of the Places which are under the Equator and the Poles, there are found every where else, *Periæcians*, *Antæcians*, and *Antipodes*.

The *Periæcians* have the same Zone and the same Temperature, the Seasons at the same time, *i. e.* the same Summer and the same Winter, are in the same Climate, have the same Increase of Days and Nights, except that in the Torrid Zone, and in the Temperate, when the one has Noon, the other has Midnight; and that in the Frigid Zone where the Days are continual they have only the Hours opposite.

The *Antæcians* are situated in the same Zone, in the same Temperature, in the same Climate, have the same Seasons, and the same Increase of Days, and Nights, but are in opposite Hemispheres; which is the Cause that when the one has Summer, the other has Winter, and when the one has the long Days, the other has the short; having nothing semblable at the same Time, but the Hours.

The *Antipodes* have also the same Zones, are in the same Temperature, in the same Climate, have the same Seasons, the same Heat in Summer, and the same Cold in Winter, the same Length of Days and Nights, but as they are diametrically opposite, they have all this in different Times.

With regard to those who live under the Poles, their diametrical Opposition, their Day and Night contrary, at the same Time, prove that they are *Antipodes*; and their Situation under the like Extremity of the same Meridian equally distant from the Equator, the same Hours of the natural Day, may make them pass for *Antæcians*, with this Difference, that when the one has a continual Day, the other has a continual Night, at the same Time.

But for those who live under the Equator they may be considered both as *Periæcians*, and as *Antipodes*, who notwithstanding have nothing like other *Antipodes*, but of being diametrically opposite, being in every Thing else true *Periæcians*.

It must be observed that our *Periæcians* are *Antæcians* to our *Antipodes*; that our *Antipodes* are *Periæcians* to our *Antæcians*, and that our *Antæcians* are *Antipodes* to our *Periæcians*.

Note, That from this we'll pass to the Division of the Surface of the Globe, by *Climates* and *Parallels*.

The Manner of discovering the Situation of Places, by the Height of the Pole, and Latitude, or Distance of the Equator, being not in use among the Antients; they searched that Situation by the Difference of the Length of the Days; which made them think of dividing the Surface of the terrestrial Globe, by means of Circles parallel to the Equator, into several Parts, or small Zones, each whereof should contain the same Lengths of the Days.

They gave to those Portions, or small Zones, the Name of *CLIMATES*, from *κλίμα*, *Inclination*, or *Climate*, signifies rather Increase, because of the same Increase or Length of Days which those have who live in the same small Zone, which they subdivide by a Circle, or parallel Line, into two *Demi-Climates*, to which they gave the Name of *Parallel*; so that each *Climate* contains two *Parallels*, or *Demi-Climates*.

There are two Sorts of *Climates*. Those which are between the Equator, and the Polar Circles, where the artificial Days increase insensibly, are regulated by half Hours; and those who live between the Polar Circles and the Poles which contain continual Days, are regulated by Months, or 30 continual Days.

The *Parallels* are likewise of two Sorts, the one divides the *Climates* of half Hours into Quarters, and the other divides the Days of a Month into 15 Days.

Therefore *Climate* is a Space of the Surface of the terrestrial Globe contained between two parallel Circles, or Lines, between which there is a Variation of

an half Hour, or of 30 Days in the longest Days of the Year.

Likewise the *Parallel* is a Space of the Earth contained between two Lines, or parallel Circles, between which there is a Difference, either of a Quarter of an Hour, or of 15 Days in the longest Days of the Year.

The *Climates* and *Parallels*, are, between them, very unequal; in those of artificial Days, the more they approach the Equator, the broader they are, and diminish in proportion, as they depart from the Equator and approach the Poles.

The *Climates* of continual Days, on the contrary, are broader in proportion they are nearer the Poles; and diminish as they depart from them, and advance towards the Tropicks.

The Inequality of the Latitude of the *Climates*, as well of artificial, as of continual Days, proceeds from the different Obliquities of the Horizons, with regard to the Course of the Sun, when it is in the Tropick; where it determines the Length of the longest Days, for all the Inhabitants of the same Hemisphere.

There are sixty *Climates*, thirty between the Equator and the Arctick Pole, for the northern Hemisphere, and thirty between the Equator and the Antartick Pole for the opposite Hemisphere, which we commonly call Southern.

The thirty *Climates* of each Hemisphere are divided into *Climates* of half Hours, or artificial Days, and *Climates* of continual Days.

The *Climates* of half Hours are reckoned between the Equator and the Polar Circles, to the Number of 24. Because the artificial Day being always of 12 Hours under the Equator, and of 24 Hours, in the longest Day of the Year under the Polar Circles, the Increase is of 12 Hours, which make up 24 half Hours, and consequently 24 *Climates*.

The *Climates* of continual Days are reckoned between the Polar Circle and the Pole, to the Number of six, and by Months; because the longest Day under the Polar Circle, is of a natural Day, *i. e.* of 24 Hours, and of six Months under the Poles; which make up six Months of Increase, which are distributed by Months, each whereof makes a *Climate*.

The sixty *Climates* making up 120 *Demi-Climates*, or *Parallels*, *i. e.* 60 *Parallels* for each Hemisphere, there will be 48 by Quarters of an Hour, for the 24 *Climates* of Half-hours, and 12 for the *Climates* of Months, which together make up the 120 *Parallels*.

Note, That the People under the Equator have no *Climate*; those whose longest Day is of 12 Hours and an Half have one *Climate*; or are towards the End of the first *Climate*: Those whose longest Day is of 11 Hours, have two *Climates*, and thus in order to 66 Degrees 31 Minutes, where there are, as I have observed already, 24 *Climates*, *i. e.* that they are at the End of the last *Climate* of an Hour, because their longest Day lasts 24 Hours; and as from the End of the twenty-fourth *Climate*, every Quarter of a League towards the Pole, the Day increases 24 Hours at once, afterwards a Week, a Month, &c. the six last *Climates* have been determined by the Difference of a Month of continual Day more at their End, then at their Beginning.

The ancient *Geographers*, who confined the *Climates* to what they imagined the habitable Parts of the Earth, only allowed of seven; under which were comprehended the Regions known to them; and design'd the *Climates* of the opposite Hemisphere, which they thought habitable, though unknown to them, by the opposite Situation in which they were with respect to the *Climates* known to them.

They began to reckon their known *Climates* where the longest Day is of $12\frac{1}{2}$ Hours, which they imagined to be the Beginning of the Habitations of the Torrid Zone; therefore they establish'd their first *Climate* between $12\frac{1}{2}$ Hours, and $13\frac{1}{2}$ Hours; the se-

cond between $13\frac{1}{2}$ Hours and $13\frac{3}{4}$ Hours; thus every Half-hour; and called every one of the seven *Climates* by the Name of some celebrated City, Isle, Sea, or River through which the middle Parallel pass'd. Therefore they made the first pass thro' *Meroe*; the second thro' *Sienna*; the third thro' *Alexandria*; the fourth thro' *Rhodes*; the fifth thro' *Rome*; the sixth thro' *Pontus*; and the seventh thro' the Mouth of the *Borysthenes*; to which have been added since an eighth, passing thro' the *Rhipæan* Mountains; and a ninth passing thro' the *Tanais*.

To these nine *Climates*, *Ptolomy* in his *Geography* added the Value of nine other *Climates*, as much of the Earth being known in his Time, viz. two *Climates* for the southern Hemisphere, and the Value of seven *Climates* for the northern Hemisphere. It must be observed, that against the Method of his Predecessors, he does not reckon by *Climates*, but by Parallels of Quarters of an Hour, and that he begins them at the Equator, which he reiterates in his *Almageste*, where after he has distributed his Parallels, a little otherwise than in his *Geography*, which however accounts for the same Increases, he adds the Days that increase as far as to 24 Hours under the Polar Circle, and places between that Circle and the Pole six Parallels, which contain each an Increase of a Month, which shews that the Antients have established more than seven *Climates*, since they have divided the whole Surface of the terrestrial Globe into *Climates* and Parallels, as we do; but that what most of the Antients shew of the Earth, was comprised but in seven *Climates*, then in nine; and that in *Ptolomy's* Time was known the Value of sixteen *Climates* of the northern Hemisphere, and the Value of two of the opposite Hemisphere.

Note, That *M. Mathion* has invented a Line of an excellent Use to determine by the sole Inspection, without Movements, Tables, or Writings, the longest Day of all the Countries of the World, at least as far as the Polar Circle. That Line is drawn from the 90 Degree of the Equator to the 66 and an Half of the first Meridian. The Use of this Line is, that if one wants to know the longest Day of some Country, he must observe where that Line cuts the Parallel of the Country in Question, and what Meridian passes thro' that Place, then reckon 15 Meridians for one Hour, i. e. 4 Minutes of Hours for each Meridian; and that Number of Hours is the Hour of Sun rising in the Middle of Summer in that Country, whence the Duration of the whole Day will be known. For Example, If we would know for *Paris*, which has almost 49 Degrees of Latitude; we'll look what Meridian passes thro' the Place where the said Line cuts the 49th Parallel, which is the 60th Meridian, for which we must reckon 4 Hours, since 4 times 15 are contained in that Number 60; therefore in the Middle of Summer the Sun rises at four in the Morning at *Paris*, and in all the Countries of the same Parallel, or of its Anti-parallel, i. e. of the 49th Degree, Southward. And hence it is easy to judge that the longest Day is of 16 Hours, since from 4 in the Morning to 12, there is 8 Hours, and as many to Sun setting. Therefore the longest Day of those two Parallels is of 16 Hours.

The *Geographers* perceiving that the Division of the Surface of the terrestrial Globe into *Climates*, could be of no other Use than to consider that Surface in general, and from South to North, judged, that not only a more exact Division was necessary to mark with a greater Regularity, the Situation of every Place from South to North, but that another should be established from East to West.

Having discovered that the Poles determine to their respect, the North and South; that the Extent from East to West is perfectly marked by the Equator, whose Circuit contains double the Distance which is between the two Poles; they have called *Latitude* the Space of the terrestrial Globe, which runs

from North to South; and *Longitude*, that which extends from East to West, and that for this Reason, because that Part of the Earth, then known to them, had once more Extent from West to East, than from South to North.

In Imitation of Geometers who divide all Sorts of Circles into 360 Parts, *Geographers* divide the Circumference of the terrestrial Globe into 360 Degrees. Therefore they divide the Length of the Surface of the Globe by 360 Semi-Circles, or meridional Lines drawn from one Pole to the other into 360 Parts, which they call Degrees of *Longitude*, thereby to measure the Length thereof. And because the Distance between the two Poles, makes but half the Circumference of the whole Globe, they divide the Breadth of the same Surface between the two Poles, but into 180 Parts, or small Zones, which they call Degrees of *Latitude* to measure its Breadth, and these Degrees are distinguished by the Poles, and the 179 Lines, or Circles parallel, and equi-distant.

As the Equator is the greatest of the parallel Circles, and in an equal Distance from the Poles, *Geographers* have establish'd it the Rule and the first of those Circles, and begin to reckon from it the Degrees of *Latitude*, advancing towards the one or the other Pole. Therefore these *Latitudes* being reckon'd twice towards one or the other Pole, are found divided by the Equator into Degrees of *Northern Latitude*, and Degrees of *Southern Latitude*, with respect to us, 90 Degrees on each Side.

And because each parallel Circle, by its Circumference on the terrestrial Globe, marks the same Degree in its whole Circuit, i. e. in both Hemispheres; *Geographers* divide each Hemisphere, by the Equator, into two equal Parts, Northern and Western, which makes up four Quarters for the whole Surface of the terrestrial Globe; and to let us know in what Part of the two Hemispheres, Eastern and Western, that *Latitude* is found, they express if that *Latitude* be in the northern, or southern Parts of the one, or other Hemisphere. Therefore to avoid Confusion, they reckon four Times the Degrees of *Latitude* 90 between the Equator and the Arctick or Northern Pole; and 90 between the Equator and the Southern Pole for our Eastern Hemisphere; reckoning again twice 90 for the other, or Western Hemisphere, between the Equator and the same Poles, which together make up 360, tho' they mark but 180 Degrees of *Latitude* or small Zones, for the parallel Circles which contain thus one Degree of each Hemisphere.

The Degrees of *Latitude* are mark'd in Globes, on the first simple Meridian, which is the first *Longitude*; and only twice 90, one for each Circle. But in Maps they are mark'd on the first whole Meridian; which dividing both Hemispheres, cut likewise all the Circles of *Latitude* into equal Parts; therefore the Degrees are mark'd there four Times, one for each Demi-Circle, or Parallel of *Latitude*.

All these Degrees, in the Globe and Maps, are mark'd one by one; but for the Lines or Circles which divide them, are drawn five by five, ten by ten, or fifteen by fifteen, according to the Bigness of the Globe, or Map.

These Degrees of *Latitude* thus marked, shew in what *Latitude* Regions and Places are situated, which is the Distance from the Equator to the Place proposed; and give at the same Time the Altitude of the Pole, i. e. how much the Pole is risen above our Horizon, which passes as much beyond the Pole, as we are distant from the Equator; the *Latitude* of one Place, and the Altitude of the Pole being equal.

The 360 Degrees of *Longitude* are marked in the Globe, and the general Maps of the Earth, one by one; the Demi-circles or Meridians, which distinguish them, are delineated five by five, ten by ten, or fifteen by fifteen, according to the Bigness of the Globe or Map.

These Degrees are reckoned from West to East; because the Antients being more sure of the Western

Extremity of the Lands of our Continent, as being next Neighbours, they have established there the first Line of the *Longitudes*, whence they began to reckon from West to East the 360 Degrees of *Longitude* for the Length of the Earth.

The Demi-Circles, or Lines of Longitude, which are the same with the Meridians, are drawn from one Pole to the other, towards which they are conducted from the Equator; these Lines make the Space they contain narrower, in Proportion they depart from the Equator and approach the Poles, where they terminate that Space into a *Point*; therefore a Degree of Longitude marked on the Equator, which must be conceiv'd to extend the whole Space which is between the Equator and the Poles between two of those Lines, diminishes in Proportion it departs from the Equator, and becomes with those Lines, a Point under the Poles.

The Degrees of Longitude thus marked, shew the *Longitude* of Countries and Cities, which is their Distance from the first Longitude, or first Meridian: The Longitude being the Arch of the Equator, or of a Parallel comprised between the Meridian of a Country, City, or Town, &c. and the first Meridian.

Therefore *Geographers*, by means of the Degrees of *Latitude*, divide the Surface of the terrestrial Globe from North to South, and by means of the Degrees of Longitude, they divide the same Surface from West to East. When they consider that Surface from North to South, *i. e.* from one Pole to the other, they divide it into 180, or twice 90 Degrees of *Latitude*, or small Zones, all of the same Breadth; but the Circuit of each diminishing in Proportion they depart from the Equator, and approach the one or other Pole, being never but two alike, *viz.* those which are at an equal Distance from the Equator, the two first having in their Circuit the same Extent with the Equator; and the two Ninetieths and last, having for Extent but what the Circle drawn at one Degree of Latitude of the Point of the Pole can inclose in its Circumference. And when *Geographers* consider that same Surface from West to East, they divide it into 360 Parts or Degrees of *Longitude*, which are very different from those of *Latitude*; considering that each Degree of *Latitude* has always the same Proportion in all the Extent of its small Zone, which is properly speaking, a Circle of one Degree in Breadth; when as each Degree of *Longitude*, considered in its Extent, which is from one Pole to the other, is broad in its Middle, and picked, or in *Point*, at its Extremities, being broad but on the Equator, and diminishing as they advance towards the Poles, where they terminate in a Point.

The *Geographers*, who, as we have observed, have followed the Astronomers, in establishing the Equator for the first Circle, or Parallel of Latitudes, have likewise made use of their Meridians for their *Longitudes*; but Astronomers having not yet found any Thing in the Heavens to determine the first Meridian, the Opinions of *Geographers* have been found divided, with regard to the Place where the first *Longitude* may be fixed.

The Western Nations of our Continent, and the *Arabs* have placed it at the Western Extremity of our Continent, whence they reckon the other *Longitudes* from West to East. The People of the East, and particularly the *Indians*, have established the first *Longitude* in the Middle of our Hemisphere, at a Place situated at 90 Degrees, from the one and the other Pole, *i. e.* under the Equator, which Place they have also pretended to be distant of 90 Degrees of *Longitude* from each Extremity of our Continent, *viz.* at 90 Degrees of the Western Coasts, and at 90 Degrees of the Eastern. Then they have afterwards established that first Longitude at the eastern Extremity of our same Continent, in order to follow, in reckoning the other Longitudes, the Course of the Sun; and tho' this Order be preferable, Use has notwithstanding authorised, among the western Nations, that of reckoning from West to East.

Though the People of the West have all agreed to place the first *Longitude* at the West of our Continent, they nevertheless differ among themselves as to the Place where they fix that *Longitude*. *Ptolomy*, and the Antients, have placed the first Longitude at the *Fortunate Islands*, which we suppose to be the *Canaries*. Among the *Arabs*, some have follow'd *Ptolomy*; and others place it at the Streight of *Gibraltar*.

Some modern Authors have established the first Longitude at the *Tercieres Islands*; others at the Islands of *Cape Verd*, at the *Pike of Teneriff* in the *Canaries*. The *Castilians* fix it at *Toledo*; the *Portuguese* at *Lisbon*; the *French* could pretend the same Thing for *Paris*; the *English* for *London*: And thus all other Nations could place the first *Longitude* at their capital City.

All these different Opinions having but little or no Foundation, that of *Ptolomy* is preferable, since he fixes his first Meridian, and consequently his first Longitude, at the first Lands; and that Meridian thus placed, consider'd as entire, *i. e.* with its Supplement, contains, in its Hemisphere, the antient Continent: Therefore most of the *Europeans*, at present, place the first Longitude, or first Meridian, at the *Isle of Ferre*, the most Western of the *Canaries*.

The Observation of Latitudes is made exactly enough, either by the meridian Altitude of the Sun, or by that of the fix'd Stars, which last is the most exact; that is to say on Land; the Observation which one is obliged to make, there, at several Times, for the same Place, shewing plainly that the Observations of Latitudes made at Sea cannot be very just, nor taken, with all the Exactitude required, since they are made but once, *en passant*, and in a Place which is not stable.

Note, That we'll next divide the Surface and Solidity of the terrestrial Globe by *Measures*.

The whole Circuit of the terrestrial Globe taken upon one of the great Circles, either by the Latitude or Longitude, being of 360 Parts or Degrees; *Geographers* (following the Example of Geometers, who after they have divided every Circle into 360 Parts, subdivide each of those Parts into 60 others) have likewise divided each of their Degrees into 60 Minutes, and subdivided the Minute into 1000 Parts, to which they give the Name of *Geometrical Paces*, because they serve to measure the Earth.

Each *Geometrical Pace* is composed of five geometrical Foots;—the *Foot* is composed of 12 Inches;—the *Inch* of 12 Lines;—and the *Line* of 12 Points.

The Degree thus divided into 60 Minutes, or 1000 geometrical Paces, serves for a Foundation and Rule, for the Evaluation of all Sorts of itinerary Measures, great, middling, or little of all Countries.

In the Evaluation of *Measures*, let them be ever so indifferent, by Means of the Number of 1000 Paces, they contain:—The Degree contain 60 *Italian Miles*,—48 common *English Miles*,—15 common *German Miles*,—20 common *Polish Miles*,—10 common *Hungarian Miles*,—25 common, 30 small, and 20 great *French Leagues*, 17½ *Spanish Leagues*,—12 *Swedish Leagues*,—80 *Wersts* of *Muscovy*,—20 *Farsangs* of *Persia*,—25 *Kasses*, and 12½ *Gos* of *India*,—250 *Ly*, and 25 *Pu* of *China*,—20 *itinerary Measures* of *Japan*.

The 1000 geometrical Paces, being the Rule of all the itinerary Measures, I'll make Use of it here to measure the terrestrial Globe.

As the *Terrestrial Globe* is a solid Body, comprised under a single Superficies, four Things are to be consider'd in it, *viz.* the *Circuit*, the *Diameter*, the *Surface*, and the *Solidity*; which will be easily determined, after we have observed with the Geometers, that all Circumference is very near to its Diameter at the Rate of 22 to 7; and approaching nearer the entire Exactness (unknown yet) at the Rate of 355 to 113; that multiplying the Circumference by the Diameter,

Diameter, the Surface of the terrestrial Globe is found. And that multiplying the third of the Surface, by the Semi-Diameter, or the Surface by the sixth Part of the Diameter, the Solidity of the Globe is discover'd.

This presuppos'd, the Circuit of the terrestrial Globe, being of 360 Degrees, it must be of 21600 Minutes, or common *Italian Miles*.

The *Diameter* is of $6875\frac{1}{2}$ of those Miles, or thereabouts. — The *Surface* of 148.580,800 of those Miles Square, which are so many Plans of a Mile in Length and Breadth. — The *Solidity* is of 170,180.000,900 Miles Cube, *i. e.* so many Solids and Squares make a Mile in Length, Breadth, and Thickness.

It will be easy to reduce by those Miles, or by the whole Degree, all the different Measures abovemention'd. For Instance, if we would make that Supputation by common *French Leagues*, 25 of which make a Degree, the Circuit of the terrestrial Globe will be just 9000 of those Leagues. The Diameter of $1164\frac{1}{2}$ a little more. The Surface of 25.782.750. The Solidity of 12.310.188.843 $\frac{1}{2}$ or thereabout. So that, according to this Supputation, it may be said that the whole Circuit of the Earth, is 21,600000 geometrical Paces, or common *Italian Miles*; or 9000 common *French Leagues*. That its Surface contains about 148 Millions and a half of thousand geometrical Paces, or common and square *Italian Miles*; or 25 Millions and a half of common *French Leagues*. And that in its Solidity, are comprised 170 Millions of Millions, 181 Million of thousand geometrical Paces or common cube Miles of *Italy*.

Note, That as the terrestrial Globe consists both of Earth and Water, I'll consider the Solidity and Surface of the Water a-part; that by comparing them together, we may be capable to judge by how much the one can surpass the other in Quantity; in Case all the Lands were known, and the Sea was not unequal in its Depth.

Tho' the Magellanick Continent be not yet entirely discover'd, no more than the Antarctic Lands, the Globes and Maps leave us Room to judge that there may be very near as much Water as there is Earth on the Surface of the terrestrial Globe.

If that Equality was just, the Surface of the Water would be 74.255.400. *i. e.* 74 Millions of thousand geometrical Paces, or square common *Italian Miles*.

With Regard to the Depth of the Sea, it is well enough known near the Coasts; but that's nothing in Comparison of the vast Extent of the rest of the Sea, the Depth whereof is unknown.

Pilots say, a Sea without Bottom, when it has more than two hundred Fathoms in Depth; some pretend that it does not exceed five hundred Fathoms, *i. e.* about half a Mile; tho' it has been found by Experience, that it was in some Places 4000 geometrical Paces deep.

But suppose that the Sea was equally a Mile deep every where, the Solidity of the Water would be of about 74.255.400. geometrical Paces, or common *Italian Miles*.

The Earth has almost as much Thickness, as its Demi-Diameter, except Places where the Sea is supposed to be a Mile deep; so that taking the 74.255.400. cube Miles of the Sea, from the Totality of the Solidity of the whole terrestrial Globe, which we have said to be of 170.181.000.900. it will remain 170.106.745.500. cube Miles for the Solidity of the Earth. Therefore for about 74 Millions of cube Miles, which the Sea could have in giving to it a Mile in Depth, the Earth would have more than 170 Million of Millions, a hundred and six Millions and a half of cube Miles.

Note, That we are indebted for the Determination of the Bigness of the Earth to the late King of *France*.

It is true, that *Snellius* and *Riccioli*, attempted it towards the Middle of the last Century, but they were so unhappy in their Discovery, that they differed yet of 7500 Fathoms on the Length to the Degree,

i. e. of more than $\frac{1}{8}$ on the Circumference of the Earth; when *Louis XIV.* commanded that as exact a Measure as could be, should be taken of the terrestrial Globe; and the famous *M. Picard* who was entrusted with it, executed it with all the Care and Exactness, the King's Orders and the Importance of the Thing requir'd. This Measure taken by so celebrated an Astronomer, was thought to be exactly that of the Earth; till Experiences made soon after on Ponderosity, found unequal in different Climates, made its Figure to be call'd in Question; and if its Figure was not that of a perfect Globe, its Bigness could not be known, because the Degrees of the Meridian, were no longer equal, as supposed by *M. Picard*.

Mr. Richer having departed for *Cayenne*, in 1672. to make in that Island astronomical Observations, found that his Pendulum Clock, which he had regulated at *Paris* on the mean Motion of the Sun, being transported to *Cayenne*, which is but about five Degrees distant from the Equator, did go slower by 2' 28" every Day. He brought back this Experience into *France*, which became the Object of the Attention of the most curious Philosophers and Mathematicians. It was presently found that this Experience supposed the Ponderosity less at *Cayenne* than at *Paris*. When the Pendulum which regulates the Clock, departs in its Motion from the vertical Situation, the Strength which brings it back to it, it's the Ponderosity, and it brings it back the sooner, the greater it is, and later the less it is. The Pendulum does not permit the Needle of the Clock to mark or shew each Second on the Dial, but after it has ended one of its Oscillations. Therefore if the Needle shews less Seconds during one Revolution of the Stars, the Pendulum employs more Time in falling back into its vertical Situation; and the Strength which pushes it, and the Ponderosity, is less. It is true that in hotter Climates, the Rod of the Pendulum, as any other Rod of Metal, grows longer, and its Conglution retards the Oscillations. A longer Pendulum, all Things besides equal, oscillates slower than a shorter one; but it is exactly enough discover'd by how much the Heat lengthen the Pendulums, and consequently by how much it retards their Motions; and notwithstanding the Heats of *Cayenne*, the Slowness observed could not be attributed to that Cause; therefore the Ponderosity was smaller at *Cayenne* than at *Paris*.

But what was the Cause of that Diminution of Ponderosity? A Body which turns round the Centre, makes a continual Effort to depart from that Centre, which Effort is called *centrifuge Force*. All Bodies which turn are subject to it; and in those which make their Revolution at the same Time, it is proportionable to the Bigness of the Circle they describe. The Earth's making every Day one Revolution round its Axis, all Bodies, all Parts of the Matter which compose it, describe Circles; all partake of the *centrifuge Force*, and each more or less, according to the Bigness of the Circle it describes: That *Force*, or Strength vanishes at the Poles, and is greater than any where else under the Equator, because that Circle is greater than all those which describe the various *Points* of the Surface of the Earth. The total Effect of the *centrifuge Force*, is to tend towards dispersing Bodies from the Centre of the Circles they describe, and a Part of that *Force* is opposite to Ponderosity, which, in all Places, tends towards making all Bodies fall, as near as possible, in the Centre of the Earth; that Part of the *centrifuge Force* opposite to Ponderosity, is greater the nearer it approaches the Equator: 1. Because the Circles those Bodies describe are greater: 2. The more one approaches the Equator, the more the Direction of that *Force* is opposite to Ponderosity.

The *centrifuge Force*, therefore, diminishes, the nearer the Equator a Place is, much more the Ponderosity is diminished in that Place; and Ponderosity

derosity thus alter'd, must appear smaller at the Equator, than towards the Poles; and smaller in Places nearer the Equator, than in those which are at a greater Distance from it: This was observed after the Pendulum had been carried from *Paris* to *Cayenne*. Whence it was concluded, that there was no depending on the Measure of M. *Picard*, but for the Degree he had measured; and that the Figure of the Earth, instead of being a perfect Globe, should be a little flatten'd towards the Poles, and have the Shape of an Orange. But the Measures of M. *Cassini* give the Earth a quite opposite Figure, viz. that of a lengthen'd Spheroid, or of a Lemon. These Measures were repeated by M. *Cassini* at different Times, in different Places, with different Instruments, and by different Methods; and the Result of six Operations, made in 1701, 1713, 1718, 1733, 1734, and 1736, was always that the Earth was stretched towards the Poles. The best of those Methods was found to be that taken from the Observation made by Travellers, that after their Departure, in following the Direction of the Meridian, the Elevations of the Stars were not the same at the Place where they arriv'd, as they were at that from whence they departed. After having travell'd 20 Leagues, there was found the Difference of a Degree in the Elevation of the Stars; and it was hence concluded, that a Degree of the Circumference of the Earth was of 20 Leagues; and the whole Circumference 7200. To account for this Conclusion, we must observe, that the Altitude of a Star, is the Angle form'd by the horizontal Line, and that drawn from the Eye of the Spectator to the Star; but as the Stars made Use of to measure the Earth, must be as near the Zenith as possible, to avoid the Refraction of the Atmosphere, which is great towards the Horizon, and subject to great Variations; instead of referring the Altitude of the Stars to the horizontal Line, it is referred to the vertical Line, according to which a Thread loaded with Lead is directed. It is easily demonstrated by the Hydrostatick, that this Line is every where perpendicular to the Surface of the Waters, and has the same Figure with that of the Earth; since in all Places the Coasts follow the Surface of the Sea, and never rise above it, but of a Height, which is nothing with Regard to the Totality of the Surface of the Earth; that Line with Lead, perpendicular to the Surface of the Waters, is taken every where, for the Perpendicular to the Plane which touches the Surface of the Earth in that Place.

This vertical Line is always directed exactly towards a Point imagined in the Heavens, directly above a Place, and called, as we have already observ'd, the Zenith of that Place. This Line can serve as the horizontal Line to measure the Height of the Star, because as it makes with it a right Angle, the Distance of a Star to the Zenith is always equal to a right Angle, the less the Elevation of the Star is above the Horizon. And if in two Places of the Earth, the Elevation of a Star is different, its Difference to the Zenith differs, likewise, of the same Quantity.

It is by this Method that M. *Picard* having measur'd the Distance between *Paris* and *Amiens*, and observ'd the Angles form'd by the two Verticals of *Amiens* and *Paris*, found the Degree of the Meridian to be of 57060 Fathoms.

M. *Cassini* being order'd to measure the whole Meridian of France, divided that Meridian into two Arches, one extended from *Paris* to the meridional Extremity of the Kingdom, of $6\frac{1}{4}$ Degrees; the other from *Paris* to the northern Extremity of $2\frac{1}{4}$ Degrees. One of the Advantages these Operations had over that of M. *Picard*, was the Bigness of those Arches; the other was the Possibility of giving the Comparison of two Arches of the Meridian, one Southward, and the other Northward. For if there was some Inequality between the Degrees of the Earth, as pretended by Mess. *Newton* and *Huy-*

gens, that Inequality should be thereby discovered; and with a still greater Security, because on several Degrees those Differences should have been accumulated.

M. *Cassini* had published in 1718, a Book of the Bigness and Figure of the Earth, in which, after he has related all the Operations he had already made, he concluded, not only that the Earth was lengthen'd towards the Poles, but determin'd, besides, the Quantity of that Elongation, and all the Dimensions of the Figure of the Earth; which was an *Ellepsoïde*, lengthen'd towards the Poles, whose Axis was of 6579368 Fathoms, and whose Diameter from the Equator was 6510796, and the first Degree Northward of *Paris*, which M. *Picard* had determin'd of 57060 Fathoms, was but of 56975 Fathoms. The principal Object of this Work, the most useful, was the Table found in it, of the Value of each Degree of the Meridian, and of each Degree of Latitude; and all the other Measures taken by M. *Cassini* in 1733, 1734, 1736, confirm'd very well that Table.

These Measures being found contrary to the Figure which the Rules of Hydrostatick seem to give to the Earth, and the Decision of that Question appearing of some Importance, *Louis XV.* ordered in 1736, that two Companies of learned Mathematicians should go, the one to the Equator, and the other to the Polar Circles, to take the Measures which were supposed more decisive than that M. *Cassini* had taken in France. We know nothing yet of the Measures taken by the Mathematicians sent to the Equator; but those of the Polar Circles have brought over theirs, which contradict all that M. *Cassini* has done, and make the Earth flatten'd. M. *de Maupertuis* and his illustrious Companions, have found the Degree of the Meridian where it cuts the Polar Circle of 57438 Fathoms, that is to say, of about 1000 Fathoms bigger than it should be according to M. *Cassini*'s Table. But without pretending to decide the Question between M. *Cassini* and the Gentlemen who came lately from the Pole, here follows a Table, one Column whereof is formed on the Measures given by M. *Cassini* in his Book of the Bigness and Figure of the Earth, and the other Column on the Measures of Messrs. of the North. Those Gentlemen have found in *Laponia*, in the Latitude of $66^{\circ} 20'$, the Degree of the Meridian of 57438 Fathoms; and having measured again with the same Instrument the Degree in France, at the Latitude of $49^{\circ} 22'$, they have found it 57183 Fathoms, bigger 208 Fathoms than that same Degree was given by M. *Cassini*. According to these Measures, and taking the Meridian of the Earth for an Ellipsis, the Diameter of the Equator is found 6562480 Fathoms, and the Axis of the Earth 6525600: These two Numbers are very near to one another, as 178 to 177. It is true, that the Report of the Axis of the Earth to the Diameter of the Equator, will be determined yet more exactly, if the Mathematicians sent to Peru, bring back an exact Measure of the Degree of the Meridian towards the Equator. The more the two Degrees compared together, are distant, the more the Comparison made is advantageous to determine the Figure of the Earth; but however, the Advantage which can be got from that Comparison, depends likewise on the Exactness of the Measure of each Degree; and the Exactness of the Measures on which we depend appears to be such, that it could counter-balance, or surpass the Advantage which could proceed from a greater Distance between the measur'd Degrees. A Circumstance which appears to be of great Importance is, that the Amplitude of the Degrees compar'd, has been determined with the same Instrument.

When one has two Degrees of the Meridian very well measured, the Value of each Degree of Latitude is easily determin'd, by using the Theorem given by Sir *Isaac Newton*, and demonstrated

by *M. Maupertuis*; that the Degrees of the *Meridian* from the Equator towards the Pole increase, like the Square of a Sine of Latitude.

As to the Degrees of Longitude, if we take *M* for the Demi-Axis, *N* for the Demi-Diameter of the Equator, *T* for the Tangent of the Latitude, *G* for the Degree of the Circle, *R* being the Radius thereof, we'll have $NGG : \sqrt{(NNR + MMTT)}$ for the Degree of Longitude, or for the Degree of the Circle parallel to the Equator, which passes thro' that Latitude.

By this Formula, the following Table may be fill'd; where the Degrees are only given five by five, and all the intermediate Degrees placed in it, but as the Calculation is troublesome and tedious, the following Formula may be used, which will always give a sufficient Exactness. Let *N* be the Demi-Diameter of the Equator; *D* the Difference between the Demi-Diameter of the Equator, and the Demi-Axis; *S* the Sine of the Latitude; *C* the Cosinus, and *G* a Degree of the Circumference of the Circle; *R* being the Radius thereof: The Formula to find each Degree of Longitude, will be $\frac{NCG}{RR} \pm \frac{CSSGD}{R^4}$; in which the Sign - is for the Earth lengthen'd, and the Sign + for the Earth flatten'd.

TABLE of the Degrees of LATITUDE.			
Latitude.	Degrees of M. Cassini.	Degrees of M. de Maupertuis.	Differences.
0	58020 Fath.	56625 Fathoms.	+1395 Fath
5	58007	56630	1377
10	57969	56655	1314
15	57906	56690	1215
20	57819	56740	1079
25	57709	56800	909
30	57580	56865	715
35	57437	56945	492
40	57285	57025	260
45	57130	57110	20
50	56975	57195	- 220 Fath
55	56825	57275	455
60	56683	57350	667
65	56555	57420	865
70	56444	57480	936
75	56355	57530	1175
80	56287	57565	1278
85	56243	57585	1342
90	56225	57595	1370
	Axis of the Earth, 6579368 Fath.	Axis of the Earth, 6525600 Fathoms.	53768 Fath.

TABLE of the Degrees of LONGITUDE.			
Longitude.	Degrees of M. Cassini.	Degrees of M. de Maupertuis.	Differences.
0	56820 Fath.	57270 Fathoms.	450 Fath.
5	56695	57050	455
10	55935	56410	475
15	54845	55340	495
20	53325	53850	525
25	51400	51955	555
30	49075	49665	590
35	43380	46995	615
40	43335	43970	635
45	39965	40610	645
50	36295	36930	635
55	32360	33970	610
60	28185	28755	570
65	23805	24315	510
70	19255	19685	430
75	14560	14900	340
80	9705	10000	235
85	4900	5020	120
90	0	0	0
	Diameter of the Equator, 6510796 Fath.	6562480 Fathoms.	51684 Fath.

Note also, That as the artificial Globe, and geographical Charts, are the true Representation of the Surface of the Earth, I must give the Description

of both, and instruct my Pupils how to use them, before I proceed to a more particular Division of that same Surface; beginning by the Globe; but as we have already mention'd the celestial Globe in our Treatise of *Astronomy*, and inform'd there our Pupils of all Things he should know relating to it, I'll confine myself here to the terrestrial Globe; as the only one adapted to this present Subject.

The *terrestrial GLOBE* is an artificial Sphere, on whose Surface are delineated the principal Places of the Earth, in their proper Situations, Distances, &c. together with the Circles imagined on the Surface of the terrestrial Sphere.

Note, That the Construction of a *terrestrial Globe*, whether of Metal, Plaister, Paper, &c. is the same as that of a *celestial*, the same Circles being delineated on both; and as for the Places, viz. Cities, Towns, &c. they are laid down from the Longitudes and Latitudes given; as the Stars are from their right Ascensions, and Declinations: Hence all Problems, depending on the Circles, may be equally wrought on either *Globe*; as the Ascensions, Declensions, Amplitudes, Azimuths, Risings, Settings, Altitudes, &c. of the Sun; the Length of Day and Night; Hours of the Day and Night; Crepuscula, &c.

The Use of the *terrestrial Globe*, is to exhibit the several Affections, and Phænomena of the different Places of the Earth, depending on Magnitude, &c. in an easy, obvious Manner, without the Trouble of trigonometrical Calculation.

Note, That it is very difficult to find a *Globe* perfectly round, exactly divided by its Circles and their Degrees, which turns as it should round its *Pivots*; and with all the Conditions necessary to make exact Observations: Among the Globes made of Pastebord, it is almost impossible to find one. But suppose we should find such a Thing, we may gratify our Curiosity upon it by the following Propositions, which I have judged the most necessary.

1. To find on a *terrestrial Globe* the Latitude and Longitude delineated on that Globe. Bring the Place to the graduated Side of the Brass Meridian: The Degree of the Meridian it cuts, is the Latitude requir'd; and the Degree of the Equator at the same Time under the Meridian, is the Longitude requir'd.

2. The Latitude and Longitude given, to find the Place on the Globe. Seek on the Equator the given Degree of Longitude, and bring it to the Meridian; then count from the Equator on the Meridian, the Degree of Latitude given, towards this or that Pole, as the Latitude is either North or South; the Point under this is the Place requir'd.

3. To find the *Antipodians*, *Peripodians*, and *Antipodes* of any Place. 1. The given Place being brought to the Meridian, count as many Degrees on the Meridian from the Equator towards the other Pole. The Point thus arrived at, is the Place of the *Antipodians*. 2. Note the Degrees of the Meridian over the given Place, and its *Antipodians*; and turn the *Globe* till the opposite Degree of the Equator comes under the Meridian; or which amounts to the same, till the Index which before stood at twelve, comes to the other twelve: Then will the Place corresponding to the former Degree, be the *Peripodians*; and the latter that of the *Antipodes*.

4. To find what Place of the Earth the Sun is vertical to, at any Time assigned. 1. Bring the Sun's Place, found in the Ecliptick, to the Meridian, and the Index to the Hour of twelve; noting what Point of the Meridian corresponds thereto. 2. If the given Hour be before Noon, subtract it from twelve Hours; and turn the *Globe* towards the West, till the Index points at the Hours remaining. Thus will the Place required be under the Point of the Meridian before noted.

noted. 3. If the Hour be after Noon, turn the *Globe* in the same Manner towards the West, till the Index points at the given Hour: Thus again will the Place requir'd be found under the Point of the Meridian before noted. If at the same Time you note all the Places which are under the same half of the Meridian with the Place found, you will have all the Places to which the Sun is then in the Meridian; and the opposite half of the Meridian will shew all the Places, in which it is then Midnight.

5. A Place being given in the Torrid Zone, to find two Days in the Year wherein the Sun is vertical to the same. 1. Bring the given Place to the Meridian, and note the Degree of the Meridian corresponding thereto. 2. Turn the *Globe* about, and note the two Points of the Ecliptick passing through that Degree. 3. Find on what Days the Sun is in those Points of the Ecliptick: For on those Days he is vertical to the given Place.

6. To find those Places in the Torrid Zone, to which the Sun is vertical on a given Day. Bring the Sun's Place in the Ecliptick to the Meridian; then turning the *Globe* round, note all the Places which pass thro' that Point of the Meridian; those are the Places requir'd. After the same Manner are found what People are *Asians* for any given Day.

7. A Place being given in the Frigid Zone, to find on what Days of the Year the Sun does not rise; and on what Days he does not set to the same. 1. Count as many Degrees in the Meridian from the Equator towards the Pole, as is the Distance of the given Place from the Pole. 2. Turning the *Globe* round, note all the Points of the Ecliptick, passing through each Point noted in the Ecliptick: By this Means you will have the Arches which the Sun describes when he neither rises nor sets; and the Points themselves give the Places of the Sun, when he neither rises nor sets, at the Beginning and Ending. 3. Find what Days of the Year the Sun is in those Places: These are the Answers to the Question.

8. To find the Latitude of Places wherein any given Day is of any given Length. 1. Bring the Sun's Place for the given Day to the Ecliptick, and set the Index to the Hour of twelve. 2. Turn the *Globe* till the Index points at the Hour of Rising and Setting. 3. Raise and depress the Pole till the Sun's Place appear in the eastern or western Side of the Horizon: Then will the Pole be duly elevated, and consequently the Latitude given.

9. To find the Latitude of those Places in the Frigid Zone, where the Sun does not set for a given Number of Days. Count so many Degrees from the next Tropick, towards the equinoctial Point, as there are Units in half the Number of the given Days; by Reason the Sun in its proper Motion, goes nearly a Degree every Day. 2. Bring the Point of the Ecliptick, thus found, to the Meridian: Its Distance from the Pole will be equal to the Elevation of the Pole, or Latitude of the Places requir'd.

10. Any Hour of the Day or Night being given, to shew all those Places to which the Sun rises and sets; where it is Noon or Midnight; and where Day or Night. 1. Find what Place the Sun is at that Time vertical to, as already taught. 2. Let this Place be brought to the Zenith of the wooden Horizon, *i. e.* elevate the Pole as the Latitude of that Place requires. Then will the Places on the eastern Side of the Horizon, be those the Sun is setting to; and on the western Side, that he rises to; those under the upper Semi-circle of the Meridian, have it Noon; and those under the lower, Midnight. Lastly, to those in the upper Hemisphere, it is Day; and to those in the lower, Night. Hence, as in the Middle of an Eclipse, the Moon is in that Degree of the Ecliptick opposite to the Sun's Place; by the present Problem it may be shewn, what Places of the Earth then see the Middle of the Eclipse, and what the Beginning or Ending.

11. To find what Places of the Earth a Planet, *v. gr.* the Moon is vertical to, any Day of the Year.

1. Mark the Planet's Place on the *Globe*, as above taught. 2. Bring this Place to the Meridian, and note the Degree over it. 3. Turn the *Globe* round, the Places which pass under the Point are those requir'd.

12. The Declination of a Star, or any other Phænomenon given, to find what Parts of the Earth the same is vertical to. Count as many Degrees in the Meridian, from the Equator towards one Pole, as are equal to the given Declination; *viz.* towards the North, if the Declination be Northward; and towards the South, if the Declination be South. Then turning it round the Places that pass through the Extremity of this Arch, in the Meridian, are the Places requir'd.

13. To determine the Place of the Earth where any Star, or other celestial Phænomenon, will be vertical at any given Hour. 1. Elevate the Pole according to the Latitude of the Place, from whose Noon, or Midnight the Hours are number'd. 2. Bring the Sun's Place for that Day to the Meridian, and set the Index at 12 o'Clock. 3. Determine the Place of the Star on the Surface of the *Globe*, and bring it to the Meridian: The Index will shew the Difference of Time between the Appulse of the Sun and Star to the Meridian of the Place: Note the Point of the Meridian over the Place of the Star. 4. Find in what Places of the Earth is then Noon, and set the Index to 12 o'Clock. 5. Turn the *Globe* towards the West, till the Index have passed over the Interval of Time between the Culmination of the Sun and Star. Then under the Point of the Meridian before observed, will the Place requir'd be found, and hence may be found what Place a Star, or other Phænomenon rises, or sets to, at any given Time.

14. To place the *Globe* in such Manner, under any given Latitude, as that the Sun shall illuminate all those Regions, which he actually illuminates on Earth. 1. Rectify the *Globe*, *i. e.* elevate the Pole according to the Latitude of the Place; bring the Place to the Meridian; and set the *Globe* North and South by the Compasses: Thus the *Globe* having the same Situation, with Regard to the Sun, as the Earth has; that Part thereof will be illuminated, which is illuminated on Earth. Hence also the *Globe* being situated in the same Manner when the Moon shines, it will shew what Parts are then illuminated by the Moon. And in the like Manner may we find where the Sun and Moon rise and set at any given Time.

15. To find the Distance of two Places on the *Globe*. Take the given Places in the Compasses, and apply them to the Equator: The Degrees they there subtend, being reduced into Miles, Leagues, or the like, give the Distances requir'd. The same may be done, and more commodiously, by laying the graduated Edge of the Quadrant of Altitude over the two Places, and noting the Degrees intercepted.

Note. That from the *Globe* I'll pass to the *geographical Maps*, which are yet of greater Use than the *Globe*, because they can be transported every where along with us, with little or no Trouble, when as the *Globe* cannot.

A *geographical Map*, is a Plan, or flat Figure, which represents the Description of the Surface of the terrestrial *Globe*, in the Whole, or in Part.

These *Maps* are of three Sorts. 1. *General*. 2. *Chorographical*. And 3. *Topographical*. In this Sense the Name of *general Chart* does not properly belong but to that which represents the whole Surface of the terrestrial *Globe*. The Name of *chorographical* to those which represents a large Tract of Land. And of *topographical* to those which contain but a small Tract of Land.

But these three Sorts of *Maps*, commonly called by Geographers, *geographical Charts*, are divided into *general*, *particular*, and *topographical Charts*.

Under the Name of *general Charts*, they understand not only the *general Chart* of the terrestrial *Globe*, but likewise all *Charts* which represent in general, *i. e.* in short, a Region, where none but the most considerable

able Things are figured, as the *Chart* of *Europe*, the *Chart* of *England*, the *Chart* of *Middlesex*.

They call particular *Charts*, those in which, besides Cities, Towns, and Boroughs, are also delineated all the Parishes of the Jurisdiction, represented in the *Chart*; as the *Chart* of the Diocese, *Prevostry*, or Election of *Paris*, &c.

They call *Topographical Chart*, that which is geometrically measured on the Places; and in which, besides all Boroughs, Villages, Castles, Houses, Mills, &c. are also delineated the Mountains, Hills, Heights, Valleys, Plains, &c. on which are figured Woods, Vineyards, Meadows, Arable Lands, Fens, &c. where are also mark'd the Brooks, Ponds, Marshes, Springs, &c. and generally all other remarkable Things.

We must first instruct our Pupils, in what Manner those Things are represented in the Charts, either general, or particular, that they may be capable, afterwards, to find in all those *Charts*, what relates to all the Parts of *Geography*.

1. The Land and Sea are parted, in them, from one another, by Shadows, which distinguish the Coasts of the Lands, from the Sea-shores. On the Land are mark'd the Cities, Towns, &c. and the Extent of Countries, as we have already observed. And in the Sea are marked the Shoals, Rocks, &c. that's to say, the Banks of Sand, by small Points; and the Rocks, by small Crosses, in the general Charts; but in more particular ones, the uncover'd Rocks are figur'd by Tops of Rocks; and those under Water, by small Crosses.

2. The *Cities* are mark'd in the general Charts of the terrestrial Globe of a whole Sheet, by a simple *Round*; in those of the Globe of several Sheets, and in those of the four Parts of the World of one, or several Sheets, the *Round* of the most considerable Cities, is adorned with several Towers: In less general Charts, as those of a Region, or of a large Kingdom, where several Cities are render'd bigger, the *Capitals* are distinguish'd from the rest by their Bigness: In the *Charts* of a Province, of a whole Sheet, where all the Cities or Towns are mark'd, they are distinguish'd by their different Bigness into large, middling, and small; and in the particular *Charts*, where all the Parishes are figured, the great Towns are commonly in Plan, or adorned with several Towers and Steeples; and the others in Proportion. The Market-Towns are figur'd bigger than the simple Parishes; and the Villages, which have a Parish-Church, are design'd by a Steeple, at the Top whereof there is a Cross.

3. The *Mountains* are marked with a great A, much erased, shadowed on one Side with small Waves, to shew the Declivity of the Mountain.

4. The *Forests* and *Woods*, are figur'd by Heaps of young Trees.

5. The *Rivers*, are Lines which run Serpent-wise.

6. *Bridges*, are mark'd by two small parallel Lines traced through the Rivers.

7. *Lakes* are shadow'd, in the same Manner, as the Sea is parted from the Land.

8. *Marshes* are represented by small Waves, intermixed with small Points and Herbs.

9. The Extent of Regions, of Provinces, or of Jurisdictions, is inclosed with Points, which part them from the neighbouring Places, and thereby mark the Limits; the *Frontiers* of the whole Country in general represented in the *Chart*, are commonly large Points; and the Subdivisions into Provinces, or Jurisdictions, are small Points.

10. In some particular *Charts* of Bishopricks, there are often mark'd *Wind-Mills*, *Water-Mills*, and *Fords*.—*Wind-Mills*, are figur'd by a St. Andrew's Cross, or X, at the Top of the Spindle.—*Water-Mills* are design'd by a Round, cross'd in the Middle.

Note, That the general *Chart* of the terrestrial Globe, represents its Surface in Plan, according to the Rules of Optick, and as if each Hemisphere was concave, though it be convex; whence it happens,

that the Middle of each Hemisphere, is shorten'd with regard to the Extremities, which is the contrary of what the Eye discovers, in considering the Globe; the Middle whereof appears bigger than the Extremities, because of the convex Roundness of the Globe.

In all *Charts*, either general or particular, are figur'd certain Characters or Marks, to some Towns, or other considerable Places. Those Characters are either for the Church, or the Temporality.

In the general *Charts*, those for the Church signify:—The *double Cross*, an Archbishoprick; the *simple Cross*, a Bishoprick; the *Crozier's-Staff*, an Abbey.

The Characters which relate to the Temporality in the Governments of *France*:—A *Hand of Justice*, signifies a Parliament, or sovereign Court; a *Sun*, marks a Chamber of Accompts, or Court of Aids; a *small Round*, or *full Moon*, at the Top of a Point, marks a Generality; a *half Moon*, designs the Elections, or Receipt.

In the *Charts* of *Germany*:—A *spread Eagle*, is put to the Imperial Towns.

A. H. I. P. These Letters denote an Abbey of Monks, Imperial, and Principality.

A. F. I. P. An Abbey of Nuns, Imperial, and Principality.

A. H. I. An Abbey of Monks, Imperial.

A. F. I. An Abbey of Nuns, Imperial.

In the *Charts* of *Poland*:—The *double Weather-Cocks*, mark the Palatinates; the *simple*, denote the *Châtellenies*.

In the *Charts* of *Turky*:—Two *half Moons*, mark a *Beglerbeg*, or general Government; and a *half Moon*, denotes a *Sangiac*, or particular Government.

Each *Chart* has commonly a Scale of *Leagues*, or of *Measures*, used in the Places it represents. There are often joined to them those of the neighbouring Countries, because of the Frontier Places, or Limits of the Countries; but the thousand geometrical Paces, 60 of them making up a Degree, are almost always added to them, to shew of how many thousand geometrical Paces the Leagues of each Country are composed of; and how many of those Leagues are wanted for a Degree of Latitude.

The general *Charts*, of the five Parts of the World, of a Sheet of Paper, have commonly no Scale at all, no more than those which represent the great Regions of those great Parts, the Degrees of Latitude being sufficient to measure the Distances, as I'll shew afterwards.

Geographers divide each Degree of Latitude into 60 Minutes, and the Minutes into a thousand Parts, which they call *geometrical Paces*, because they serve to measure the Earth; and these geometrical Paces serve for Rule, or Foundation, to make the Evaluation of all the different itinerary Measures, both Antient and Modern, of every Country.

The *itinerary Measures* most common, and most in Use among the Antients, were the *Stadium*, the *Mile*, the *Parasange*, the *Schene*, &c.

The *Stadium* was of 125 geometrical Paces.—The *Mile*, or 1000 Paces, is of 8 *Stadia*, or 1000 geometrical Paces.—The *League* of the antient *Gauls*, is of 1500 geometrical Paces.—The most common *Parasange* is of 30 *Stadia*, or about 4000 geometrical Paces; some *Parasanges* being from 20 to 60 *Stadia*.—The *Schene*, the most common, is of 40 *Stadia*, which make 5000 geometrical Paces, there being likewise some of 20, 30, 60, and 100 *Stadia*.

The *Stadium* has been in Use in all the Places where there were *Greek Colonies*; and their Authors, *Historians*, and *Geographers*, have seldom made Use of any other Measure, to give the Distances of other Countries.

The *Romans* divided the Highways of their Empire by *Miles*, which they mark'd each by a Stone or Column; whence their Authors express, sometimes, the Mile by the Word *Lapis*; saying, *à tertio ab urbe Lapide*, *à septimo Lapide*; or *ad tertium Lapidem*, *ad septimum*.

septimum Lapidem, i. e. at three Miles, at seven Miles, &c.

The *Persians* had also divided the Roads of their Empire by *Parasanges*; and the *Egyptians* introduced their *Schœnes* among the neighbouring Nations.

This Variety of antient Measures, and their Difference, is one of the greatest Difficulties those who want, at present, to treat of the antient Geography, meet with; because antient Historians having not carefully enough examined that Diversity, have often given Distances greater or smaller than they were in Reality.

The modern *itinerary Measures*, are *Miles*, *Leagues*, *Wersts*, *Farsanges*, *Kosses*, *Gos*, *Ly*, *Pu*, *Station*, *Journey* or *Diète*, and *Hour*.

Distances are expressed by *Miles*, in *Great-Britain*, *Italy*, *Germany*, *Poland*, and *Hungary*.—By *Leagues*, in *France*, *Spain*, *Sweden*, and *Switzerland*;—by *Wersts*, in *Muscovy*;—the *Farsanges*, are particular to *Persia*; the *Kosses* and the *Gos*, to *Indostan*; the *Ly* and the *Pu*, to *China*: They count by *Stations*, the Distances in *Arabia*, *Cartary*, and in the greatest Part of *Africa*; among several People of *America*, by *Journies*. The *Europeans* count in the Countries they possess out of *Europe*, by the Distances used in their own Countries: And the Use of reckoning by *Hours*, is not only received in *Europe*, but likewise in several Places of the other Parts of the World.

Each Country has not only its particular Measure, but has them likewise of several Sizes; I'll only mention here those which are most in Use, and which are call'd common.

The common Mile of *Italy* consists of 1000 geometrical Paces;—the common Mile of *England*, is of 1250;—the common Mile of *Scotland* and *Ireland*, is of 1500;—the common Mile of *Germany*, is of 4000;—the common Mile of *Poland* of 3000;—and that of *Hungary*, of 6000.—The common *League* of *France*, is of 2400 geometrical Paces; the small one of 2000, the great of 3000; and in some Places of 3500.—The common *Spanish League*, is of about 3428; and those of *Sweden* and *Switzerland*, of 5000.—The *Werst* of *Muscovy*, is but of 750 geometrical Paces;—the common *Farsang* of *Persia*, of 3000;—the common *Kosse* of the *Indies*, is of about 2400, or 2500; likewise the common *French League*;—the *Gos*, is double the *Kosses*.—The *Ly* of *China*, is but 240 geometrical Paces; ten of which make the *Pu*, which contains likewise 2400 geometrical Paces, like the common *French League*.—The *Japoneze itinerary Measure*, is of two Miles.—The ordinary *Station*, is of 20,000 geometrical Paces.—The *Journey*, or common *Diète*, is of 30,000 geometrical Paces; and an *Hour's Walk*, is of 3000.

So that referring to the Degree of Latitude, all Sorts of Measures, by Means of those Miles, I have said to be 60 for a Degree; the Degree of Latitude count 60 common *Italian Miles*,—48 *English Miles*,—15 *German Miles*;—20 Miles of *Hungary*;—25 common, 30 small, and 20 great *French Leagues*;—17½ *Spanish Leagues*;—12 *Swedish Leagues*, and likewise of *Switzerland*;—80 *Wersts* of *Muscovy*;—20 *Farsanges* of *Persia*;—25 *Kosses*, and 12½ of *Indostan*;—250 *Ly*, and 25 *Pu* of *China*;—20 *Itinerary Measures* of *Japan*.

The same Degree includes 3 *Stations*; the Value of two *Journies*, or *Diètes*, and 20 *Hours-Walk*.

Besides these common Measures, I have said that each Country had some of different Bigness; the Evaluation of which will be easily made, by Means of the 1000 geometrical Paces, or Minutes of the Degree of Latitude, when those different Measures are marked in the Scale.

Note, That those who express the Distances, by *Leagues*, or *Miles*, do not often consider, that there are *Leagues* of 2000, of 2500, and of 3000 geometrical Paces; if they be *French Leagues*; that there are *Miles* of 715, and 6000 geometrical

Paces; if they be *German Miles* of only 1000, 1250; and 3000, if they be *English Miles*; and thus of the Measures of other Countries.

Among the *French*, who have travelled in the *Indostan*, some say that the *Kosse* makes but half a *French League*; and others pretend, that it makes a whole *League*.—The *English* put two *Kosses* for an *English Mile*.—Some *Dutch* will have three *Kosses* to make two *German Miles*; others put but two *Kosses* for the Mile of the *Low-Countries*; but none of them determine which of the *French Leagues*, which of the *English*, *German*, and *Low-Countries Miles*, they understand, and which we have said to be different in Bigness, therefore it is very difficult to determine the Distance they pretend to give; since there is a great Difference between 100 *Kosses* at 3000 geometrical Paces each, and 100 *Kosses* which are but of 2500, of 2000, or 1500, of 1250; and of 1000. But tho' there be *Kosses*, thus different in Bigness, most of the Relations we have of those Countries confound them, as if there was but one Sort of *Kosses*, whereby Travellers give false Distances, as it would be easy to prove by an infinite Number of Instances; though I'll content myself, here, to relate the Distance, which the famous *Tavernier* gives in his Relation of *Surat* to *Goa*. Those two Places are upon the same Coast, which runs from North to South; and differ only of a Degree in Longitude. He puts between those two Places 61 *Gos*, says, that the *Gos* is worth four *Kosses*, and that the *Kosses* are equal to common *French Leagues*; therefore there would be 244 *Kosses*, or *French Leagues*, of 25 to a Degree, which make more than 9½ of Latitude; and had he even estimated those *Leagues* but as small *French Leagues*, 30 of which are wanted for the Degree, the 244 *Leagues* would make yet eight Degrees of Latitude; which, at his Manner of Reckoning, should be between *Surat* and *Goa*; though, according to the *Portuguese* and *Dutch Maps*, there are not six Degrees. The *Geographer*, who had reformed on the *Map* the Distances and Position of those two Places, on that Relation of *Tavernier*, had been accused of Ignorance, and the *Map* consider'd as false, by those who have travell'd since in those Countries. The Distances taken by *Stations* are no less uncertain, since those *Stations* are only regulated by the Conveniency of Water-Carriages, which is not found every where on the Road, which render the *Stations* very unequal.

We ought to form the same Judgment of *Journies*, or *Diètes*, which must be distinguished into *Journies* of common Travellers, *Journies* of Caravans of Horses, and *Journies* of Caravans of Camels; and even all those Sorts of *Journies* are not equal among themselves, the Facility or Difficulty of the Roads, rendering them lesser or greater. F. *Marini*, in his Relation, gives to the *Tonquin*, according to the common Opinion of the People of that Country, 50 *Journies* in Length from South to North, and 20 in Breadth from East to West; having said before, that this Length is of 1500 Miles, and the Breadth of 600 Miles; whence it appears, that the Author of that Relation gives 30 Miles for each Journey; but as that Country has not above 13 Degrees of Latitude, which make but 780 Miles, in a direct Line, it follows hence, that those *Journies* must be but of 15 or 16 Miles, since, otherwise, the *Tonquin* would rise to 35 Degrees of Latitude, which would contain two Thirds of *China*.

Though almost all Relations are full of such Errors, several notwithstanding tax the *Maps* of being erroneous; and accuse *Geographers* of Ignorance, as if they were responsible for the Negligence of some Travellers, for the narrow Capacity of several, and for the Ignorance of others.

It is a general Rule, or rather a common Practice in *Geography*, that all Sorts of *Charts*, should always

have the *North* a-top, and consequently the *South* at bottom, the *East* on the right, and the *West* on the left Hand. Which done, it is not difficult to find the *North by East*, the *South by East*, the *North by West* and the *South by West*.

All *Charts* which are not disposed thus, are less perfect than those that are; though they be *oriented*, and will be defective and imperfect, if they are not *oriented*.

A *Chart* is *oriented* when it has a certain small Circle, or simply a Cross in some Place, with a Flower de Luce at the End, representing the Needle of a Sea-Compass; which ought to be turned towards the North.

It is pretty difficult to find precisely the *Longitude* of a Place, on a *general Chart* or *Planisphere*; because of the Curvity of the Meridians and Parallels, unless that Place be under the Equator, or under some Meridian. The same must be said of the *Latitude*, unless it be under one of the Parallels, or under the 180th Meridian, represented by the Circumference of the graduate Circle, which contains one Half of the *Chart*.

There are certain *particular Charts*, in which the Meridians and Parallels are represented, yet by curve Lines; in this Case if the *Latitude* and *Longitude* of a Place cannot be found on the *Planisphere*, or *general Chart*, Recourse must be had to the Globe.

Note, That before we search the *Latitude* and *Longitude* on the common *Charts*, we must take Notice that the Lines, divided by Degrees, which are on both Sides of those *Charts*, represent two Meridians, or at least their Division into Degrees, which are those of *Latitude*, and are worth each 20 great French Leagues. Besides, that the Lines thus divided, in the same manner a-top, and at bottom, represent the Degrees of *Longitude*, which are never worth more than 20 Leagues, unless they represent the Equator.—Now for the Use of those *Charts*.

1. If we want the *Longitude* and *Latitude* of a Place, when the Equator is not in the *Chart*, a very tight Thread must be carried on that *Chart*, so that it takes on the Place proposed, and on Numbers of equal Degrees a-top, and at the bottom: Those Degrees will be the *Longitudes*. If the Equator be in the *Chart*, it may be used in lieu of one of those Lines according to the Situation of the Place.

If we want to know the *Latitude* of the same Place, we must carry that Thread always tight to that Place, so that it be parallel to the Lines a-top, or at bottom, and it will mark the *Latitude* on the Sides.

Therefore it is easy to conceive, that a Place will be easily found in the *Chart*, whose *Latitude* and *Longitude* are known; for in carrying two Threads, as we have observed, one on the *Longitude*, and the other on the *Latitude*, that Place will be found at their Intersection.

It is as difficult to find the Distance of two Places proposed, on the *Planispheres* or *general Charts*, whose Meridians and Parallels are represented by curve Lines, as to know the *Longitude* and *Latitude* thereof; unless they be *oriented*, as we have heretofore mentioned; but in the common *Charts* it is found by the following Scale.

If the Distance of the Places proposed is longer than the Scale, the Compass must be opened of the Length of the Scale; then applying one of its Limbs on one of the Places, that Opening must be transported in a right Line, as many Times as are necessary to come at the other Place: And if the last Limb transported, does not fall just upon it, the Limbs of the Compass must be drawn nearer one another till it falls upon the Place; then that last Opening must be transported on the Scale to discover the Distance, that's to say, the Number of Leagues it contains, which must be added to that of the Distances of the Scale taken at first.

If the Distances of those Places be less than the Scale; then that Distance must be taken and brought to the Scale; If there is no Scale, it must be carried

on the Lines divided into Degrees, which are on the Sides of the *Charts*, then the Degrees it will contain must be reduced into Leagues, counting 20 Leagues for each Degree.

I'll conclude here, what I had to say of *general* or *universal Geography*, and proceed to *particular Geography*, which I'll begin by the Division of the Earth, into four principal Parts, call'd *Continents*.

Among the four *Continents*, two are known, and two of which we have but little Knowledge.

The first and greatest of the two known *Continents*, is that we call *Ours*, the *Antient*, *Superior*, *Eastern*, and *Ptolemaick Continent*. It is call'd *Ours*, because we dwell in it; *Antient*, because we have known it; by History, for several thousand Years; *Superior*, according to the Vulgar's Opinion, which believe it to occupy the superior Part of the eastern Globe, because in the Maps of the terrestrial Globe, in two Hemispheres, it is placed Eastward of the first Meridian. And, lastly, *Ptolemaick*, because of the Name of *Ptolemy*, the first among the *Antients* who gave a more exact Description of it.

We call the second Continent known, *Other Continent*, *New*, *Inferior*, *Western*, *America*, and *West-Indies*. *Other Continent*, because on the Surface of the Globe, it is separated from our Continent by the Sea; *New*, because it was known to us but within two Centuries; *Inferior*, according to the Vulgar's Opinion, which believe it under ours; *Western*, because described Westward of the first Meridian, in the terrestrial Globe; *America*, of the Name of one of the first Navigators who discover'd it; and, lastly, the Vulgar calls it *West-Indies*, *Indies* because its Riches equal those of the true *Indies*; and *West*, because situated Westward of *Europe*.

A third Continent is supposed towards the South, which may be call'd *Southern Continent*, with respect to us, which is call'd *Terra Australis*, *Terra Incognita*, *Magellanick Land*, and *Land of Quir*. It is call'd *Terra Australis*, because situated towards the South, with regard to us; *Incognita*, or *Unknown*, from the little Knowledge we have of it; *Magellanick*, from *Magellan*, the first *European* who approached it; and *Land of Quir*, from *Fernando Quir*, the first who discover'd it, and gave us a more certain Knowledge of it.

It will be easy to make a fourth Continent of the *Arctick Land*, if they be contiguous, and make a Body separated from *America*; and that Continent will be call'd *Northern*, or *Arctick*, from its Situation.

Our *Continent*, is divided into three great Parts, viz. *Asia*, *Africa*, and *Europe*.

The other *Continent*, call'd *America*, contains two Continents, the one call'd *North-America*, and the other *South-America*.

The two other pretended *Continents*, are not well enough known to be divided into great Parts.

From this Division of the *Continents* into great Parts, I'll pass to a Sub-division of those great Parts into their principal Regions, beginning by *Europe*; which though the lesser Part of our Continent, is notwithstanding the noblest for its Temperature, Fertility, and the infinite Numbers of its Inhabitants. Besides, it is *Europe* which has formed the greatest Men, whose Memory has been render'd immortal by their military Exploits, great Actions, &c. Greece has been *Alexander's* Cradle, *Italy* has produced the *Cæsars*, *France*, *England*, *Spain*, &c. a great Number of great Princes and Heroes.

E U R O P E.

Europe, by its Situation, has a very good and temperate Air, the Earth produces all Sorts of Corn, Vines, and Fruits in Abundance, and is covered with an infinite Multitude of Cattle.

But to confine myself to my Subject (without amusing myself with the Romances of the Origin of *Europe*) I'll say that this Part of the World is almost entirely

tirely situated in the Temperate Zone, extending from about 34 Degrees of Latitude towards 72; and from 9 of Longitude to 39, so that it may have 800 great French Leagues from South to North; and 900 in its greater Extent from East to West.

It is confined, or limited at the North by the Icy Sea; at the West by the Western Ocean; at the South by the *Mediterranean*; and at the East by the *Archipelago*, the Sea of *Marmara*, the *Pont Euxine*, the *Limen*, the *Tanais*, and by a Line drawn from the most Eastward Curvature of that River, to the Gulph of the Icy Sea, which is between the Streight of *Weigatz*, and the Mouth of the River *Oby*.

Among the Rivers of *Europe*, we take particular Notice of the *Danube* in *Turky*; of the *Volga* and *Don*, or *Tanais* in *Muscovy*; of the *Nieper* and *Wistula* in *Poland*; and of the *Oder*, *Elbe*, and *Rhine* in *Germany*.

The most easy and natural Sub-division of *Europe* (the Isles included) is into nine Parts; three of which are towards the North, three towards the South, and three in the Middle of the six others.

The three Northern Parts are: 1. The *BRITANNICK ISLES*, which contain the Kingdoms of *England*, *Scotland*, and *Ireland*. 2. *SCANDINAVIA*; containing *Sweden*, *Denmark*, and *Norway*. 3. *Muscovy*, or *White Russia*.

The three Parts which are in the Middle of *Europe*, are: 1. *FRANCE*. 2. *GERMANY*. 3. *POLAND*.

The three Southern Parts, are: 1. *SPAIN*. 2. *ITALY*. 3. *TURKY* in *Europe*.

The three last Parts are *Peninsulæ*; the three in the Middle are contiguous: Of the three Northern Parts, the first is composed of several Islands; the second, of several *Peninsulæ*; and the third, is in the Main Land.

I have included under the general Name *Germany*, as having always been Parts thereof,

1. The *Low-Countries*, or Seventeen Provinces.
2. The *Switzers*, and the *Grisons*.

I have also comprized under *Turky* in *Europe*, the Principalities which are tributary to it, viz. *Transylvania*, *Moldavia*, *Little Tartary*, &c.

Also *Lorrain*, and *Franche Compté*, under *FRANCE*; *Portugal*, under *SPAIN*; and *Savoy*, under *ITALY*.

Note, That the Manners of the *Europeans* are different, according to their different Countries; but they are generally witty, skilful, generous, and tractable; and have not that Ferocity, and Brutality, natural to the Inhabitants of the other Parts of the World: They are white, well-shaped, and agreeable.

There are several Sorts of Governments in *Europe*, viz. The *Monarchical*; as in *France*, *Spain*, &c. The *Despotick*; as in *Turky*, and *Muscovy*; the *Aristocratical*; as the Republick of *Venice* in *Italy*; the *Democratical*; as that of *Switzerland*, and of the *United Provinces*. Others, which are a Mixture of *Monarchy*, *Aristocracy*, and *Democracy*; as, in *England*, *Germany*, and *Poland*.

The *Monarchical State*, is that govern'd by a sole Sovereign.

The *Despotick*, is that where a Sovereign has Power of Life and Death over his Subjects, without any other Formality than his own Will.

The *Aristocracy*, is that which is govern'd by the Nobles.

The *Democratical*, is that where the Governors are chosen among the People.

There are several Sorts of Religions professed in *Europe*; though among so many there are but five principal, the others being only Branches, or Sects of those five.

1. The most ancient of the five is the *CATHOLICK RELIGION*; which is the reigning one in *France*, *Spain*, *Portugal*, *Italy*, part of *Germany*, *Poland*, &c. and in all that belongs in *America*, *Asia* and *Africa*, to the Crowns of *France*, *Spain*, *Portugal*, &c.

†

2. *LUTHERANISM*, is professed in *Germany*, in *Sweden*, *Denmark*, &c. and is divided into several different Sects.

3. *CALVINISM*, is professed in *Great Britain*, in *Germany*, *Poland*, &c.

4. The *GREEK RELIGION*, which made a Divorce with the *Roman Church* to follow the Schism of *Photius* false Patriarch of *Constantinople*, is professed in the Dominions of the Grand Signor, in *Muscovy*, and in some Parts of *Poland*.

Europe has five general Languages, four of which are natural to its inhabitants, viz. the *Latin*, *Greek*, *Teutonic*, *Esclavone*; and a foreign one which they have received from *Asia*, and which is the *Tartarian*, under which is comprised the *Turkish* Tongue.

Note, That *Europe* has one Prince Ecclesiastick, three Emperors, seven Kings, six Republicks, and more than three hundred Sovereign Princes; whose Estates are as Fiefs or Tributaries of superior Powers.

The Ecclesiastick Prince is the *POPE*, who styles himself *Servus Servorum Dei*.

The three Emperors are, the *EMPEROR of Germany*, called Emperor of the Holy Roman Empire.

The *EMPEROR of the Turks*, who calls himself Sultan of the *Ottomans*, or Grand Signor of the *Turks*.

The *EMPEROR of Muscovy*, who assumes the Title of Emperor of the *Two Russias*; vulgarly called *Czar of Muscovy*.

The nine Kings are;

The *MOST CHRISTIAN KING*, or King of *France*, who notwithstanding the vast Extent of his Dominions, composed of several Sovereignties, viz. *Britanny*, *Normandy*, *Burgundy*, *Provence*, *Languedoc*, &c. takes no other Title than that of King of *France* and *Navarre*.

The *CATHOLICK KING*, or King of *Spain*.

The *KING of GREAT BRITAIN*, or of *England*.

The *KING of Portugal*.

The *KING of Sweden*.

The *KING of Denmark*.

The *KING of Poland*, call'd *Orthodox*.

The *KING of Prussia*.

And the *KING of Sardinia*.

The six Republicks, are those,

1. Of *Venice*. 2. Of *Genoa*. 3. Of *Lucca* in *Italy*.
4. Of the *United Provinces*. 5. Of the *Switzers*.
- And 6. Of the *Grisons*, in *Germany*.

The 300 subaltern Sovereign Princes, are of two Sorts, viz. *Ecclesiasticks* and *Laicks*.

Among the *Ecclesiasticks* are two *Grand Masters*.

1. The *GRAND MASTER* of the *Knights of Malta*.
2. The *GRAND MASTER* of the *Teutonic Order*.

Four *Archbishops*, and the three first *Electors* of the Empire.

1. The *ARCHBISHOP* and *ELECTOR* of *Mentz*.
2. The *ARCHBISHOP* and *ELECTOR* of *Treves*.
3. The *ARCHBISHOP* and *ELECTOR* of *Cologn*.
4. The *ARCHBISHOP* of *Saltzboung*.

Twenty-two Bishops, who are,

1. *Munster*. 2. *Paderborn*. 3. *Liege*. 4. *Worms*.
5. *Spire*. 6. *Straßbourg*. 7. *Basil*. 8. *Syon*. 9. *Coire*.
10. *Briſcen*. 11. *Trente*. 12. *Constance*.
13. *Augsboung*. 14. *Frisingue*. 15. *Passau*. 16. *Ratisbon*.
17. *Rickstott*. 18. *Wurtzboung*. 19. *Bamberg*.
20. *Hidelsheim*. 21. *Osnabrug*. 22. *Lubeck*.

A *GRAND PRIOR* of *Malta*, who calls himself *Grand Prior of Germany*.

Several *Abbots*, that of *Fulde*, who has a greater Extent of Lands than any of the others.

Several *PREVOSTIES*, the most considerable of which is that of *Berchtelsghaden*.

Among the *Laick SOVEREIGNS*, are five *Electors*.

1. The *ELECTOR* and *DUKE* of *Bavaria*.
2. The *ELECTOR* and *DUKE* of *Saxony*.
3. The *ELECTOR* and *MARQUIS* of *Brandeboung*.
4. The *ELECTOR* and *COUNT* *Palatine*.
5. The *ELECTOR* and *DUKE* of *Hanover*.

An

An ARCHDUKE of *Austria*.

A GREAT DUKE of *Tuscany*.

The several *Dukes* are those of *Newbourg, Weimar, Lunebourg, Brunswick, Wirtemberg, Mecklenbourg, Lawembourg, Holstein, &c.* and all in *Germany*.

Those of *Savoy, Mantua, Modena, Parma*, and several others whose Territories are of a lesser Extent, are in *Italy*.

That of *Bouillon* is between *France* and the *Low-Countries*.

And that of *Courland* in *Poland*.

Among the *Marquisses*, the most considerable are, those of *Baden*, and *Durlach*, of *Anspach*, and of *Culmbach* in *Germany*.

And several in *Italy*, but whose Territories are of a little Extent.

Several LANDGRAVES, some of whom are Princes, *viz.*

The LANDGRAVE of *Hesse-Cassel*, and of *Hesse-Darmstadt*.

Several *Princes*, and the most considerable among them are;

The PRINCE of *Anhalt* in *Germany*.

The PRINCES of *Monaco*, of *Solfarini*, and of *Castiglione* in *Italy*.

Several *Counts* or *Earls*, among whom those who are Princes are,

Of *Nassau, Furstemberg, West-Friseland, Hohen-zollern*, and *Amberg*.

Besides whom are,

The CHAM of the *Little-Tartary*.

The *Vaivodes* of *Transilvania, Valachia, Moldavia*, and of *Ukrania*.

And the Republick of *RAGUSA*. — This Republick, and the five last Princes, are Tributaries of the *Ottoman Empire*.

At present I'll enter into a more particular Description of all the different Dominions and States, *Europe* is divided into; beginning by the Kingdom of *France*, (not through Partiality) but as acknowledged by all the other Sovereigns and Princes, as the first in Rank; and represented by all Authors, even the most partial, and most prejudiced against the *French Nation*, as the most fertile, most agreeable, and most powerful of all *Europe*.

F R A N C E.

FRANCE, is situated in the Middle of the temperate Zone, between the 42 and 51 Degree of Latitude, extending from the 15 Degree 30 Minutes of Longitude to the 29th; so that it may have 180 great Leagues from South to North, and 170 in its greatest Extent from East to West. It is limited at the North by the *British Channel* and the *Low Countries*; at the East by *Lorraine, Franche Comte, Savoy*, and *Piedmont*, from which it is separated by the *Alps*; at the South, by the *Mediterranean*, and the *Pyreneans*, which separate it from *Spain*; and at the West by the Ocean. — Its Climate is mild and very healthy; the Soil fertile in Corn, Wine, Fruit, and Hemp: There are found in it beautiful Meadows, large Forests, and agreeable Plains cover'd with numerous Flocks of Oxen, Sheep, Goats, Horses, &c. and Abundance of Game of all Sorts, as Harts, Deers, wild Boars, Hares, Rabbits, Pheasants, Partridges, Woodcocks, Plovers, Quails, &c. — These are found in its Bosom, Mines of Iron, Lead, and other Minerals. Towards the South, several Springs of Mineral Waters; a great Number of Quarries of Marble, and other very good Stones fit for Building; and likewise of very fine Slates; a great Abundance of very good Salt is made on the Coasts, where are fished all Sorts of the most delicious Fishes; in a Word, *France* produces all that can be desir'd for a delicious Life; and it is observ'd, that all that grows in it is excellently good.

France is bathed with a great Number of Rivers, four of which deserve a particular Notice, *viz.* the *Loire*, the *Seine*, the *Garonne*, and the *Rhône*, and have all their Source in it, except the last, which

has its in the Mount *St. Gothard*, in the Country of the *Grisons*, and passes through the Lake of *Geneva*.

France is divided into twelve Governments; four of which, *viz.* *Picardy, Normandy, the Isle de France, and Champagne*, are situated at the North of the River *Loire*, and towards the River *Seine*, except the first, which is yet more North than the other three: Those of *Britanny, Orleanois, Burgundy, and Lyonnois*, are in the Neighbourhood of the *Loire*; and the four others are at the South of the same River, *viz.* the *Guyenne and Languedoc*, towards the *Garonne*; *Dauphiné and Provence*, Eastward of the *Rhône*, one towards the North, and the other towards the South.

The Metropolis of the Kingdom of *France* is *Paris*, situated in the Middle of the *Isle de France*, on the River *Seine*; it is esteemed one of the fairest, best inhabited, richest, and most flourishing Cities of the whole World.

PARIS is honoured with a Parliament, a Chamber of the Accompts, a Court of *Aides*, a Mint, a Bureau of the Finances, &c. and with an Archiepiscopal See. It is adorn'd with the first University of the World, and one of the most famous; and with two illustrious Academies, embellished with a great Number of very fine Churches, Palaces, and other sumptuous Edifices.

Note, That the *French* are witty, active, quick, dexterous, industrious, inventive for the Arts and Sciences, and very good and loyal Subjects. They are polite and agreeable in their Conversation, sincere in their Words, courteous to the Ladies, but inconstant: They receive Foreigners with a great Affability, and they are so brave, that ever since the first Establishment of the *French Monarchy*, they have always been the Terror of their Enemies; and the greatest Hope of their Allies. A *French* Author is pleas'd to say, that it is easy to judge of the Merit of the *French*, by observing the implacable Jealousy Foreigners have conceived against them, tho' they have never received from them but good Offices.

France is govern'd by a very powerful King, and the Crown is hereditary in his House, with this Particularity, that none but the legitimate Issue Males can pretend to it, all Females being excluded.

There are twelve Parliaments in *France*, ever since the Conquest of *Franche Comte*; twenty three Generalities, or Bureaux of the Finances; and fourteen Universities, whose Seats I'll mark in the particular Discourse of the Cities where they are established.

It is pretended that the Parliament of *Paris* was instituted by *Pepin, Charlemagne's* Father; and that it was ambulatory, till *Philip the Fair* rendered it sedentary in 1302. The Courts of Justice of the *Isle de France, of Picardy, Champagne, Orleanois, and Lyonnois*, resort thither.

That of *Thoulouse* was instituted by the same *Philip the Fair*, in the same Year; and rendered sedentary under *Charles VII.* in 1443.

That of *Rouen* was instituted by the same *Charles VII.* in the same Year; and made sedentary in 1503. under the Reign of *Louis XII.*

That of *Grenoble* was instituted sedentary by the same *Charles VII.* in the Year 1453.

That of *Bordeaux* was instituted sedentary by *Louis XI.* in 1462.

That of *Dijon* was instituted sedentary by the same King in 1476.

That of *Alx* was instituted sedentary by *Louis XII.* in 1501.

That of *Reunes* in *Britanny* was instituted sedentary by *Henry II.* in 1553.

That of *Pau* in *Bearn* was instituted sedentary by *Henry I. King of Navarre*, in 1519.

That of *Metz* was instituted sedentary by *Louis XIII.* in the Year 1663.

That of *Tournay* was instituted sedentary by the late King *Louis XIV.* in 1669.

That of *Dole* in *Franche Comte* was instituted in the

the Year — and rendered sedentary by Philip the Good, Duke of Burgundy, in the Year 1422. it is at present transferred to *Besançon*.

Note, That the *Parliaments* in *France*, are not of the same Nature of the *Parliament* of *England*; they are on the contrary quite different, since the *French Parliaments* have no Share in the Government of the State, nor ever had, otherwise than as they are to register the Edicts the King issues out, for the Levy of Taxes; they have the Privilege to make Remonstrances, when they find those Edicts too oppressive. Those *Parliaments* are only Courts for the Administration of Justice, and judge, *In Dernier Ressort*, in their several Districts; though one may appeal from every one of them to the King's Council, in civil Matters; and their Sentences of the Criminals are executed without any Confirmation from the King. Those *Parliaments* are all composed of Noblemen, most of them of very antient and illustrious Families; and all of them Persons of considerable Estates. The *Parliament* of *Paris*, is called the Court of the Peers; because the Princes of the Blood, and all the Peers of *France*, both Ecclesiastick and Laick, have their Seats in it.

From this I'll pass to a particular Description of the twelve Governments of *France*, heretofore mention'd, beginning by that of *Picardy*.

PICARDY was once Part of the antient *Belgick Gaul*, and no Author can say, with any Certainty, whence it has borrowed the Name *Picardy*. — It extends 44 Leagues from East to West; from between the *Capelle* and *Rocroy*, to the Mouth of the River *Bresle*, which parts it from *Normandy*; and 34 from South to North, from the *Bauvoisis* to *Calais*. It confines at the East with *Champaigne*, at the West with the *Isle de France*, at the North with the *British Sea* and *Normandy*.

Its Soil is very fertile in Corn, Fruit, and Pasture, but it produces little or no Wine. Its greatest Rivers are, the *Oise*, which receives the *Serre*; the *Somme*; the *Autbie*, and the *Canche*. The two first are towards the East, and the three others run towards the West, where they disembogue into the Sea.

Note, That in the Government of *Picardy* is included the *Artois*; to which must be added, the Conquests made in *Flanders*, and *Hainault*.

Picardy is divided into seven small Provinces, which keep the following Order:—The *Tiérache*, which is in the Neighbourhood of the Rivers *Oise* and *Serre*: The *Vermandois*, *Santerre*, *Amienois*, which are *Picardy* itself, and the *Ponthieu* on the Course, and round about the River *Somme*:—Then the *Boulenois*, to which is added, what is called the *Païs reconquis*, with the Principality of *Ardres*, which is more advanced towards the North, between the Sea and *Artois*.

AMIENS, is the Capital of the whole Province; which is a very antient and fair City, very well fortified, according to the antient Method of fortifying. It is honoured with an Episcopal See, a Mint, a Bureau of Finances, and a Presidial.

ARRAS on the *Scarpe*, is the Capital of *Artois*; it is an Episcopal City, and very well fortified.

Note, That the *Picards* are Men of Letters, very good Soldiers, but a little too hot-headed.

The Government of *Picardy* is described in the following Manner:

1. The *AMIENOIS*, which includes *Amiens*, Bishop. *Corbie*, *Dourlens*, *Pecquiny*.
2. *SANTERRE*, including *Perone*, *Mandidier*, *Roye*, *Morcueil*, *Niclle*.
3. *VERMANDOIS*, including *Saint Quentin*, *Ham*, *Le Castelet*, *Beaurevoir*.
4. *TIERACHE*, including *Guise*, *La Fere*, *Vervins*, *Marle*, *La Capelle*.
5. *PONTHIEU*, including *Abbeville*, *St. Valery*, *Rue*, *Monstreuil*, *Crotoy*.

6. *BOULONNOIS*, including *Boulogne*, Bishop. *Etaples*.

7. *PAIS RECONQUIS*, including *Calais*, *Guishnes*, *Ardres*, Principality.

8. *ARTOIS*, including *Arras* Bishop. *Hesdin*, *Bapaumes*, *Lens*, *St. Venant*.

9. *FLANDERS*, which includes *Dunkirk*, *Gravelins*, *Lisle*, *Courtray*, *Douay*, *Audenarde*.

10. *HAINAULT*, including *Le Quesnoy*, *Landrecy*, *Ath*.

NORMANDY, which is the next Government (thus called from the People of the North who came to settle there) once call'd *Western Neustria*, is situated on the *British Ocean*; and may have 62 Leagues from East to West; that's to say, from *Aumale*, to the western Coast of the *Coutantin*.

It confines with the *British Sea*, at the North and West; with the *Isle de France*, at the East; and with the *Perche*, and *Maine*, towards the South.

This Province has lost a great deal of its Lustre, and of the Authority it had in the Time of its antient Dukes, who were sovereign Princes; and so powerful, that they have often maintain'd long Wars against the Kings of *France*, of *England*, and other Princes.

This Country abounds in Corn, Cattle, Woods, and Fruits, especially Apples, of which the *Normans* make excellent Cyder, which is their common Drink. There are found in it several Mines of Iron; and Fish is so common, that it is almost given for nothing.

The principal Rivers of *Normandy* are the *Seine*, into which disembogue the *Eure*, and the *Rille*, which hides itself under Ground for the Space of a League, near *Beaumont Le Roger*; the *Orne*, which passes at *Caen*; and the *Vire*, which passes at *St. Lo*, and parts the Bishoprick of *Coutance* from that of *Bayeux*.

Note, That the *Normans* have always been very warlike; which is confirmed by the Conquests of *William Duke of Normandy*, who made himself King of *England*; and by those of the Children of *Hauteville Guischarde*, who render'd themselves Masters of *Calabria*, *Naples*, and *Sicily*. They are very cunning and crafty, and do not submit themselves willingly to foreign Laws, but live under the antient Policy which they defend obstinately: They are very litigious, and are accused of not keeping their Word; otherwise they have a vast deal of Wit, and are very pious.

The Government extends no further than that Province, which is divided into *Higher* and *Lower Normandy*. The *Higher* contains the Balliwicks of *Rouen*, *Evreux*, *Caux*, and *Gisors*. The *Lower*, those of *Caen*, *Alençon*, and *Coutance*. It is subdivided into seven Dioceses, the Episcopal Cities whereof are, *Rouen*, *Lisieux*, *Bayeux*, *Coutance*, *Avranché*, *Sez*, and *Evreux*. The first four are found in this Order, on the *British Channel*, going from East to West. The three others are Southward of these, and are found in their Order returning from West to East.

The Diocese of *Rouen* contains four small Countries, called *Caux*, *Bray*, *Normand Vexin*, and *Raunois*. In the Country of *Caux* there is the Estate of *Ivetot*, which, certain Authors pretend, was erected into a Kingdom in the Year 534, by King *Clotaire*, for Reparation of the Homicide committed by him, on the Person of *Walter Lord of Ivetot*, whom he killed in the Church on *Good Friday*; but that Opinion is not approved.

At the West of *Coutance*, are seen the Isles of *Jersey*, in 18 Deg. 10 Min. Longitude, and 49 Deg. 20 Min. Latitude; of *Guernsey*, in 17° 40' Longit. and 49° 30' Latitude; and several other small ones, in the Neighbourhood of these two. These Isles belong to the King of *England*, and may have each 14 or 15 Leagues in Circuit.

The Capital of *Normandy* is *Rouen*, built on the River *Seine*, and is esteemed one of the most Trading Cities of all *France*: It has an Archiepiscopal See, a Parliament, a Mint, and a Generality of Treasurers.

CAEN, passes for the second City of *Normandy*; and is honour'd with a Bureau of Finances, and an University.

The Government of *Normandy*, is divided in the following Manner:

1. The *Archbishoprick* of ROUEN, VEXIN NORMAND, which contains, *Rouen Archbishop. Ponte-de-Larche, Gisors.*
2. ROUMOIS, containing *Quillebeuf, Montfort.*
3. CAUX, containing *Dieppe, Havre, Caudebec, St. Valery.*
4. BRAY, containing *La Ferié, Gournay, Fleury.*
5. The *Bishoprick* of LISIEUX, containing *Lisieux, Honfleur, Pont-l'Eveque, Bernay.*
6. The *Bishoprick* of BAYEUX, containing *Bayeux, Caen, Vire, Torigny.*
7. The *Bishoprick* of COUTANCE, containing *Coutance, St. Lo, Granville, Carentan, Harfleur, Valogne, Cherbourg.*
8. The *Bishoprick* of AVRANCHE, containing *Avranche, Mont St. Michael, Pont. Orson, Mortain, Eu.*
9. The *Bishoprick* of SEZ, containing *Sez, Alençon, Falaise, Argenton.*
10. The *Bishoprick* of EVREUX, containing *Evreux, Beaumont Le Roger, Bretheuil, Nonancourt, Rugles, Lire, Vernon.*

The next Government is that of the ISLE DE FRANCE, which is comprised between the Rivers of *Seine* and *Marne*. Its Extent is of 35 Leagues from East to West; that's to say, from *Neufchatel* on the *Aixne*, to *Gisors*; and as much from North to South, from *Noyon* to *Courtenay*, in *Gatinois*.

It confines, Northward, with *Picardy*; Eastward, with *Champagne*, and *Brie*; Southward, with the *Gatinois*, and *Beauvais*; and Westward, with *Normandy*.

The Soil is very fertile, in most excellent Corn, produces Wine and Fruits in Abundance: It is diversified with pleasant Plains, agreeable Meadows, and large Forests, which abound with all Sorts of Game.

The principal of its Rivers are, the *Seine*, which receives the *Marne*, and the *Oyse*, swell'd with the Waters of the *Aixne*, which passes at *Soissons*; and of the *Terrain*, which bathe the Walls of *Beauvais*.

There are distinguish'd in this Government ten small Countries, which have been dismember'd from *Champagne*, *Beauvais*, *Normandy*, and *Picardy*. In the first, between the *Marne* and the *Seine*, has been taken the *French Brie*: In the second, between the *Seine* and the Road of *Chartres*, the *Hurepois*, with Part of the *Gatinois*; between the same Road of *Chartres* and the same River, the *Mantoan*: In the third, between the Rivers *Seine*, *Oyse*, and *Epte*, the *French Vexin*, which is parted from the *Normand Vexin*, by the last of these three Rivers. Lastly, in the fourth, in the Neighbourhood of the *Terrain*, has been taken the *Bauvoisis*; between the *Oyse* and *Marne*, the *Valois*; in the Neighbourhood of the *Aixne*, the *Soissonois*; beyond the same River the *Laonnois*, with the Quarter of *Noyon*, which is beyond the *Oyse*.

The Capital of the Government of the *Isle de France*, is *Paris*; the next to it is *Soissons*, a very antient City and a Bishoprick, situated on the River *Aixne*; next to this is *Laon*, also an episcopal City, whose Bishop is ecclesiastick Peer of the Kingdom. *Bauvois*, on the River *Terrain*, and *Noyon*, near the *Oyse*, have their Bishops, Counts and Peers Ecclesiastick of *France*.

The Government of the *Isle de France* is divided thus:

1. The ISLE DE FRANCE contains, *Paris*, Archbishop. *St. Denis, Montmorency.*
2. The FRENCH BRIE, containing *Lagny, Brie Comte Robert, Rosoy, Villeneuve, St. George.*
3. HUREPOIS, containing, *Melun, Corbeil, Ferte-alais, Fontainebleau.*
4. GATINOIS, containing *Nemours, Dourdan, Courtenay, Moret, Monchery.*
5. MANTOAN, containing *Mant, St. Germain, Poissy, Meulan, Montfort-Clamacy.*
6. The FRENCH VEXIN, containing *Pontoise, Magny, Chaumont.*

7. BAUVOISIS, containing *Beauvois*, Bishop. *Clermont, Gerberoy, Merlon.*

8. VALOIS, containing *Cresy, Senlis* Bishoprick, *Ferte-Milon, Pont Sainte Maixence, Villers-Cotterets.*

9. SOISSONNOIS, containing *Soissons* Bishop. *Compiègne, Raine, Velle, Fere.*

10. LAONNOIS, containing *Laon* Bishop. *Coucy, N. D. de Liesse, Noyon* Bishop. *Chauny.*

CHAMPAGNE, the next Government, was antiently a Country famous for the Grandeur of its Counts, who possessed it in Sovereignty, and were so powerful, that they have maintained long and difficult Wars against the Kings of *France*, and *Burgundy*; and so noble, that those same Kings have contracted several Alliances with them.

It is called *Champagne*, from its beautiful and large Extent. It extends more than 46 Leagues from West to South by East, from *Lagni*, in the Province of *Brie*, to *Bourbon les Bains*, in the *Bassigni*; and 54 from South to North, that is to say from *Ravieres* in the *Senonois* to *Rocroy*.

The Soil is almost every where white and chalky, and produces no other Corn than Rye; but it abounds with delicious Wines; there are but few Forests towards the South, but they are pretty frequent towards the North: and there are found in it several Mines of Iron.

Its principal Rivers, are, the *Seine*, which receives the *Jonne* and *Aube*; the *Marne*, *Aixne*, and *Vesle*.

This Government includes the *Champagne* and the *Brie*. The *Champagne* is divided into *Higher* and *Lower Champagne*; the first comprehends the Territories of *Châlons*, of *Rheims*, the *Parthois*, *Rehelois*, and what is towards the North, viz. the Principality of *Sedan*, and of *Raucourt*, and the *Revôty of Donchery*: The other includes the Territory of *Troyes*, the *Val-lage*, and the *Bassigni*, to which is added the *Sennonois*.

TROYES, on the *Seine*, is the Capital of the whole Province; it is adorned with an episcopal See and a Mint.

RHEIMS, has its Archbishop, first Duke and Peer of *France*, who has the Honour to anoint the Kings of *France*. It has besides a famous University.

LANGRES, Capital of the *Bassigni*, has also its Bishop, Duke, and Peer.

CHÂLONS, on the *Marne*, has its Bishop, Count, and Peer.

SÈNS, on the *Jonne*, has its Archbishop, who styles himself *Primate of the Gauls*. This City is very antient, and was very famous in *Cæsar's* Time.

The Province of BRIE, is situated between the *Seine* and the *Marne*, and may have 10 or 12 Leagues in Length and Breadth.

Its Soil is not of an equal Goodness, for near *Champagne*, and towards *Chateau Thierry*, it produces pretty good Wine; and towards the *Isle de France*, the Wine is coarse. It produces every where pretty good Corn, and very good Fruits. The Country is very pleasant, and one may spend agreeably his Time there in Hunting.

The *Brie* is divided into three Parts, which are distinguished by the Names of the *Higher* and *Lower Brie*, or Country of *Galleville*, where are *Gandelu, Montmor, Thesmes, Orbay, &c.*

MEAUX, near the *Marne*, is the most considerable among the Cities of the *Higher Brie*; it is very antient, and honour'd with an episcopal See, and a Bailliwick.

CHATEAU THIERRY, on the same River bears the Title of Dutchy, and passes for the Capital of the *Higher Brie*. It is adorned with a Bailliwick, and a Presidial.

PROVINS, on the small River *Vourie*, is received, by several, for the Capital of the whole Province. It is situated in the *Lower*.

The Government of *Champagne* is divided in the following Manner;

1. CHAMPAGNE, containing *Troyes* Bishop. *Pont-sur-seine, Mery, Rameru, Plancy, Châlons* Bishop. *Epernay, Ay, Dormant.*

2. RHEMOIS, containing *Rheims Archb. Cornicy, Fismes, Geneville, Machaut.*

3. PERTHOIS, containing *Pertbes, Vitry le Francois, Larzicourt, Sainte Menbon.*

4. RETHÉLOIS, containing *Rhetel, Mezieres, Charleville, Rocroy, Sedan, &c.*

5. VALLAGE, containing, *St. Dizier, Joinville, Brienne, Vignoris, Barfur-Aube, Clervaux Abbey.*

6. BASSIGNY, containing *Langres Bishop. Chaumont, Lufy, Nogent le Roy, Bourbon les Bains.*

7. SENNONOIS, *Sens Archb. S. Julian du Saut, S. Florentin. Tonnerre Bishop. Chutles.*

8. BRIE CHAMPENOISE, containing *Provins, Meaux Bishop. Chateau, Thierry, Colomieres, Sezanne, Montereau.*

The next Government is that of BRITAINE, or BRITANNY.

Note. That after *Maximus* had usurped the Empire, and the Army he commanded in *England* had proclaimed him Emperor, *Conan*, one of his most famous Captains, who had powerfully supported him in that great Enterprize, received soon the Recompence of his Services; the Emperor gave him *Britain*, of which he caused himself to be proclaimed King, in the Year 700. (so that had this Monarchy subsisted it had been the most antient in *Europe*) his Successor quitted that noble Title in 878, under the Reign of *Louis the Stotterer*, King of *France*, to take the Quality of Earls. Afterwards they were made Dukes and Peers of *France* in 1250. and became very powerful by their great Alliances; there have been ten Dukes which have possessed it from that Time to the Year 1488, in which died the last Duke *Francis II.* leaving only a Daughter, *Anne* of *Britain*, which having been married, first to *Charles VIII.* then to *Louis XII.* Kings of *France*, that Dutchy in the Year 1532. was annex'd to the Crown by the Marriage of *Madame Claudia* of *France*, her eldest Daughter, with *Francis I.* who had for Issue *Henry II.* who, properly speaking, was the first Duke of *Britain* among the Kings of *France*.

BRITAIN, was called antiently *Aremorica*, from the *British* Word *Armor*, Sea, the Province being situated upon the Sea. Some pretend that its new Name of *Britain* was given to it by some People of *Great Britain*, which came to settle in it; but it is a gross Mistake, since it is certain that it was called *Britain*, even in the Time of the first Emperors, as *Pliny* witnesses it in his Description of the *Gauls*: And if we believe the *Venerable Bede*, born in *England*, who flourished in *Pepin's* Time, he assures us that the Isle of *Great Britain*, before called *ALBION*, was since called *Britain* by the *Gauls Britons*, who had render'd themselves Masters of it, long before *Julius Caesar*; and being afterwards expelled from *Great Britain* by the *Saxons*, returned into their native Country.

The Province of BRITAIN may have about 60 Leagues from East to West, from beyond *Vitrey*, to the Point of *Conquet*: And 40 from South to North, from the Island *Boüin*, to the Mouth of the River *Coüenon*, towards *Mont St. Michael*.

It confines Eastward with *Anjou* and *Maine*, advancing towards the West, as a Peninsula into the Ocean, which confines it on the other Sides.

Its Soil abounds in excellent Pastures and Cattle, which gives delicious Butter, which is sent as far as *Paris*, and sold there at a dear Rate. It produces Corn of all Sorts, Linc and Fruits in great Quantity, and but little Wine. A vast Abundance of Salt is made on the Coasts, where there are fished Plenty of excellent Fish. This Province is provided with the best Ports of the whole Kingdom of *France*: And the *Britons* carry on a great Commerce of Butter, Linnens of all Sorts (some of which equal in Beauty and Goodness the best *Hollands*) Brandy, Ropes, Salt, &c.

The principal Rivers *Britain* is bathed with are, the *Loire*, the *Villaine*, which receives the *Ouse*, *Blavet*, *Auseen*, *Trieux*, and *Rance*; these two last are

considerable but at their Mouth.

Note. That the BRITONS have always been a very warlike Nation, and have atchieved several great Feats of War, both against the *Goths* and against the *French*. They are very sincere, hospitable and courteous to Foreigners; love Mirth, Pleasure, and good Chear. The Nobility live in an elegant and splendid Manner: The *Britons* are very jealous of their Liberty, though they have lost it ever since the Reunion of the Province to the Crown of *France*; and the several Efforts they have made from Time to Time to recover it, have always proved vain. It is true, to keep the Remembrance that they were once a free People, they are permitted to act once in two Years, a certain Farce, which they are pleased to call the Assembly of the States of the Province; and which is in fact, a Shadow of their antient Government, which was the same as the *English* Government. There the Nobility, Clergy, and Commons, are supposed to meet to consult the Good of the Province; and there every Nobleman has a deliberative Vote, and can put a Negative upon any Thing that's transacted; but it is not much to his Advantage to do it, on Things proposed in favour of the Court; for though that Assembly is supposed to be free, and not at all over-awed by a superior Power, the King is as absolute there, as he is at *Versailles*; and if any Nobleman has the Temerity to oppose his Will, he is soon sent to change Air. Notwithstanding which the *Britons* are very loyal Subjects, and are never better pleased but when the Occasion offers to expose their Lives, and spend their Fortune in the King's Service; though they were not beloved by the late King *Louis XIV.* who was always very backward in promoting them to any considerable Posts in the Army, or rewarding them for their Services. No Province in the Kingdom can produce so antient a Nobility as *Britain* can; of which the *Britons* are not a little proud. Our Parliament, for the noble Extraction of its Members, their personal Merit, large Fortune, &c. is the most illustrious of the whole Kingdom. Our Enemies accuse us of being addicted to love Wine to Excess, but that scandalous Reflection is without Foundation, since there is no Parts of the Kingdom of *France* where that Vice is less prevailing than among us; though we are not without Imperfection; for we are obstinate, violent, and too quarrelsome.

The Government of BRITAIN is confined to the sole Province, which is divided into *High* and *Low*, one towards the East, and the other towards the West. It is particularly divided into nine *Bishopricks*, or *Receipts*, which are, *Rennes, Dol, St. Malo, St. Brieu, Treguier, St. Paul de Leon, Quimper Corantin*, otherwise *Cornouaille*, *Rennes*, and *Nantes*. The first six are found in this Order, going from East to West on the *British* Sea; and the three others Southward of these situated also of the Sea of *Gascony*, returning from West towards the East.

RENNES, on the River *Villaine*, is the Capital of *Britain*, it has an Episcopal See, a Parliament, and a Mint.

NANTES, on the *Loire*, is a very celebrated and antient City, adorned with a Bishop's See; a Chamber of Accompts, a Bureau of Finances, a Mint, and a University.

ST. MALO, a very strong Sea Port, is an Episcopal See. There are a great Number of other very considerable Cities and Towns in *Britain*, viz. *Dinan, St. Brieu, Guingamp, Lanion, Pontivi, Landerneau, Morlaix, Brest, Quimper Corantin, Quimperle, Auray, Guerande, Le Croisic, Vannes, Malestroit, Ploermel, Vitrey, Masebeoul, &c.*

The Government of BRITAIN is divided in the following Manner.

HIGHER BRITAIN.

The Bishoprick of RENNES, contains *Rennes, Vitrey, Fougères, Antrim.*

The

The *Bishoprick* of NANTES, contains *Nantes, Angenis, Chateau-Briant, Guerande Machecou, Clisson, Roche-Bernard.*

The *Bishoprick* of ST. MALO, contains *St. Malo, Dinan, Jochelin, Montfort.*

The *Bishoprick* of DOLE, contains *Dole* only.

The *Bishoprick* of ST. BRIEU, contains *St. Brieu, Pontrieu, Quintin, Jugon, Lamballe.*

LOWER BRITAIN.

The *Bishoprick* of TREGUIER, contains *Treguier, Morlaix, Guingamp, Lannion, Garlesquin.*

The *Bishoprick* of ST. POL DE LEON, contains *St. Pol de Leon, Lesneven, Landerneau, Brest, Porsal, Isle D'Ouessant.*

The *Bishoprick* of QUIMPER CORANTIN, contains *Quimper Corantin, Concarneau, Quimperlay, Douarnenes, Chateaulin.*

The *Bishoprick* of VANNES, contains *Vannes, Port-Louis, Hennebon, Auray, Malestroit, Belle Isle* Island.

Note, That there is found in the Sea of *Gascony*, in the 17th Degree of Latitude, the Isle call'd *Belle-Isle*, which is seven Leagues in Length, and three in Breadth, and about eighteen in Circuit. It was strongly fortify'd by the famous M. *Fouquet*, Lord of the Place, and Superintendent of the Finances, under the late King *Louis XIV.* which caused such a Jealousy to that Prince, for fear M. *Fouquet* should have a Design to put that Place in the Hands of the *English*, that he caused him to be arrested at *Nantes*, and carried to the *Bastille*. The King to be sure that his Orders on that Subject were punctually executed, came himself to *Nantes*, at that Time, and was in the City when M. *Fouquet* was seized. From this M. *Fouquet* is descended the present *Mareschal de Belle-Isle*.—The other *Isles*, nearer the Coast, as *Rouen, Ouessant, Bats, &c.* are smaller.

Note also, that we speak two Sorts of Languages in *Britain*; for in the *Bishopricks* of *Dol, Rennes*, and *St. Malo*, they speak *French*; in those of *Nantes, Vannes*, and *St. Brieu*, both *French* and *Briton*, which is a Kind of *Welsh*; and in those of *Treguier, Quimper-Corantin*, and *St. Pol de Leon*, nothing but *Briton*.

Note, again, That before the Revocation of the *Edict* of *Nantes*, there was a vast Number of *Calvinists* in *Britain*, especially in the *Bishopricks* of *Rennes*, and *Nantes*, even of the most illustrious Houses of the Province: But ever since that Revocation, they have insensibly dwindled away; and, at present, all the *Britons* profess, with a great deal of Zeal, the *Catholick Religion*.

The ORLEANNOIS is the next Government, and the most extended of all, since it includes fourteen or fifteen Provinces: It is call'd *Orleannois*, because *Orleans* is the most remarkable among its Cities.

The *Orleannois* extends near 100 Leagues from East to West; from beyond the *Chateau Chiton*, in the *Nivernois*, as far as the Extremity of *Poitou*: And near 68 from South to North, from *Monbrun* in *Angoumois*, to *Nonancourt* in *Normandy*.

It confines Eastward with *Burgundy* and *Champagne*; Northward with the *Isle de France* and *Normandy*; Westward with *Bretagne*, and the Sea; and Southward with *Saintonge*, the *Perigord*, the *Marche*, and the *Bourbonnois*.

Its Soil is very fertile in Corn, Wines, Fruits, Cattle, Games, in short in all that can be desired for an agreeable and commodious Life. In it is the Forest of *Orleans*, containing 70,000 Acres of Land; and it is said that in the Time of *Francis I.* it contained a hundred and ten thousand Acres. There is no Country in *France*, where there are found so many paved Roads as in this.

Several Rivers run through this Government, among which the *Loire* is the Principal. The *Indre*, the *Cher*, the *Vienne*, swelled with the Waters of the *Creuse*, come to disembogue into it between *Mont-*

foreau and *Langeft* in *Tourraine*. The *Sarte*, after it has received the *Loire* and the *Mayenne*, above *Angiers* disembogues likewise into it, below that City. The *Charante* springs from it in the *Angoumois*, which it bathes with part of its Course, after it has passed in one Corner of the *Poitou*.

This Government contains thirteen or fourteen principal Provinces, four of which are situated this side the *Loire*, in the following Order, in going from West to East, viz. the *Maine*, the *Perche*, the *Higher Beausse*, or *Païs Chartrain*, and part of the *Gatinois*; five on the *Loire*, in following its Course, viz. the *Nivernois, Orleannois, Lower Beausse, Blaisois, Touraine*, and *Anjou*; four on the other Side the *Loire*, viz. the *Berry, Poitou*, with the *Païs D'Aunis*, and the *Angoumois*, which is still farther advanced towards the South.

ORLEANS, situated on the River *Loire*, is the first City of this Government, and may be esteemed the Capital. It is a beautiful City, and was antiently the Capital of a Kingdom of its Name. It is, at present, a Dutchy, and the Appennage of the second Sons of *France*.

The NIVERNOIS, is the most eastern Country of this Government, and is esteemed one of the most fertile of all *France*: The *Loire* runs through it towards the West, and the *Jonne* springs from it towards the East.

NEVERS, on the *Loire*, is the Capital, and was erected into a Dutchy Pairie, by *Francis II.*

The BLAISOI, is agreeable for Hunting. The City of BLOIS, built on the *Loire*, is the Capital thereof, and was made a Bishop's See by *Louis XIV.* for one of the Favourites of *Madame Maintenon*.—The Royal Castle of *Chambor* will be famous throughout all Ages for the Massacre of that celebrated Hero the Duke of *Guise*. It is situated on the River *Cousson*.

The TOURAINE, is recommended for its excellent Melons; it is bathed by the Rivers *Loire, Cher, Loir, Judle, &c.*—TOURS, on the *Loire*, is Capital of this Province, and is honoured with an Archiepiscopal See: The Inhabitants carry on a great Commerce of Silks.

The Province of ANJOU, is very agreeable, and very fertile in Wines, Pasture, and Hemp: It abounds with Fowl, Cattle, and Game of all Sorts. Quarries of Slates are so common in it, that the Country People cover their Houses with it. It is bathed by the Rivers *Loire, Sarte, Mayne, and Loir*. It is a Dutchy which the Kings of *France* give for Appennage to their Third Sons.

The Capital is ANGIERS, situated on the *Sarte*: It has a Bishop, an University, and an Academy.

The Province of MAYNE, is very fertile in Corn, Wine and Hemp. It has very good Pasture which feed a vast Number of Cattle. It abounds with Game, which is very good. Mines of Iron are found in it; and the River *Mayne* runs through it towards the West.

The MANS is the Capital, and a Bishop's See. It is a very antient City, situated on the *Sarte*. *Caesar* calls its Inhabitants *Cenomani*.

The PERCHE is one of the smallest Provinces of the Government *Orleannois*; but its Soil is fertile in Corn, Pastures and Forests. It is divided into *Higher* and *Lower*.

NOGENT-LE ROTROU is esteemed the Capital, tho' it be but a Borough; and MORTAIGNE is more considerable, because it is the ordinary Residence of the Bailly.

The *Higher* and *Middle Beausse*, which includes the *Chartrain*, and the *Vaudanois* is also a very agreeable Country.

CHARTRES, on the River *Eure*, is the Capital of the *Chartrain*. It is said that it was built a little after the Flood; and that it was there the *Druides* used to assemble. Its Cathedral, which is an Episcopal See, is one of the most antient of Christendom.

DREUX, on the River *Blaise*, disputes for Antiquity, with *Chartres*. It is imagined that it is from *Dreux* the antient *Druides* borrowed their Name.

VENDOSME on the *Loire*, is the Capital of the *Vendomois*: It bears the Title of *Dutchy Pairie*.

That Part of the *Gatanois* included in this Government, has nothing considerable but the *Canal of Briare*, made to join the Rivers *Loire* and *Loing*.

BERRY is the Heart of *France*, and produces Abundance of Corn, Wine, Pasture and Game. It is bathed with a great Quantity of Brooks, which all disembogue into the *Cher*, the *Indre*, and the *Eure*.

BOURGES is the Capital of this Province; *Cæsar* speaks of it as of a very antient City, under the Name *Avaricum*; it is honoured with an Archbishoprick, and an University, which is not the most famous of the Kingdom.

PORTOU is the largest Province of this Government; its Soil is very fertile: The *Vienne* is the greatest of its Rivers; the *Cher*, which springs from it, and passes at *Poitiers*, comes to disembogue into it below *Châtellerau*. The *Seure Niortoise*, and the *Nantoise*, have also their Source in it.

POITIERS on the River *Clain*, is the Capital of this Province: There are seen in it several Marks of Antiquity; it is adorn'd with an Episcopal See, a Generality, and an University.

LUSIGNAN is a small Town, which has the Glory to have given Kings to *Jerusalem* and *Cyprus*. Its Castle, which was once one of the strongest Bulwarks of *France*, was built, as it is said, by the famous *Melusine*.

CHATELLERAU, on the *Vienne*, is famous for its Cutlery; it was erected in *Dutchy Pairie*, in 1514.

VIVONNE, once a Viscounty, has been since erected into a Dutchy, in favour of the brave Marechal of *Vivonne*, of the illustrious House of *Roche-chouare*.

Note, That the *Abbey of Fontevraut*, in this Province, is one of the most illustrious of *France*, among the Abbeys of Nuns. It has always been, ever since its Foundation, the pious Refuge of a great Number of Princesses, and of Ladies of the first Quality. There are reckoned among its Abbesses, several Princesses of the Royal Blood of *France*, and of the august Name of *Bourbon*.

The Country of AUNIS has nothing recommendable but *Rochelle*, which is the Capital: This City is very strong of Situation, and fortified with several good Bastions and Out-works. It was often besieged, taken and retaken by the *English* and *French*; but the most memorable Siege was that of the Year 1627, where the great Cardinal *Richelieu* caused that famous Dyke to be erected in the Sea, which has been the Admiration of the whole Earth.

ANGOUMOIS is but a small Country, which notwithstanding is esteem'd for the Mildness of its Climate, and its Fertility in all Things, particularly in excellent Corn, Saffron, Hemp and Meadows: There are found in it Iron Mines, and Abundance of very good medicinal Herbs of all Sorts.

It is bathed by the *Charente*, which springs from it, and which the *Tardouere* swells up with its Water near *Maulle*.

ANGOULEME on the *Charente* is the Capital: This City must be very antient, since it is said that its Walls fell down of Age, at the Approaches of the great *Clovis*. *Francis I.* erected it into a *Dutchy Pairie* for his third Son; this King himself was Earl of *Angoulême* when he came to the Crown.

The GOVERNMENT OF ORLEANNOIS is divided in the following Manner.

ORLEANNOIS contains *Orleans*, *Baugency*, *Lorris*, *Sully*, *Gergeau*, and *Pluviers*.

NIVERNOIS contains *Nevers*, *Charity*, *St. Pierre le Montier*, *Decise*, *Dopzy*, *Clamecy*.

BLAISIS contains *Blois*, *Vandosme*, *Châtcaudun*, *Mer*, *Remorantin*.

TOURRAINE, contains *Tours*, *Amboise*, *Loches*, *Chinon*, *Longez*, *Ile-Bouchard*.

MAYENNE, contains *Mans*, *Mayenne*, *Laval*, *Ferté-Bernard*, *Sablé*, *Beaumont le vic*. *Château du Loir*.

PERCHE, contains *Nogent le Rotrou*, *Mortaigne*, *Bellême*, *Perriere*, *Fuillet*.

BEAUSSE, contains *Chartres*, Bishop. *Nogent le Roy*, *Dreux*, *Galliardon*, *Bonneval*.

GATINOIS, contains *Montargis*, *Etampes*, *S. Far-geau*, *Gien*, *Milly*, *Château-Regnard*.

ANJOU, contains *Angiers*, Bishop. *Saumur*, *La Fleche*, *Lude*, *Château-Gontier*, *Brissac*, *Craon*, *Segree*, *Baugey*, *Monfereau*.

POITOU, contains *Poitiers*, Bishop. *Luçon*, Bishop. *Châtelleraut*, *Maillelais*, *Lusignan*, *Loudun*, *Richelieu*, *Niort*, *Roche-Chouart*, *Vivonne*, *Fontevraut Abbey*.

The ISLES of *Oleron*, *Ré* and *Oye*, *Nermoutier*, *Arnot*.

AUNIS, contains *Rochelle*, Bishop. *Marans*, *Surgeres*, *Nuaillé*.

BERRY, contains *Bourges*, Arch. *Château-Roux*, *Isoudun*, *Le Blanc*, *Argenton*, *St. Aignan*, *Dun le Roy*, *Jancerre*, *Monfaucon*, *Henrichemont*, *Valençay*.

ANGOUMOIS, contains *Angoulême*, *Cognac*, *Maulle*, *Roche-foucaut*, *Jarnac*, *Bouteville*, *Ruffec*, *Châteauneuf*, *Marthorn*.

The GOVERNMENT OF BURGUNDY, is but an eighth Part of the antient Kingdom of *Burgundy*; for that Kingdom included *Savoy*, *Switzerland*, the Dutchy of *Zeringhen*, *Provence*, *Dauphiné*, *Lyonnois*, and the Dutchy and Earldom of *Burgundy*, known under the Name of *Franche Comte*: The three first of those Provinces composed the *Transjurana Burgundy*, i. e. the *Burgundy* beyond *Montjura*, at present *Mont St. Claude*, and the five last made up the *Cesjurane Burgundy*, i. e. this Side the Mount. This was again divided into higher and lower; one included *Provence* and *Dauphiné*, and the other the Dutchy of *Burgundy*, of this Time. The *Lyonnois* was sometimes of one, and sometimes of the other *Burgundy*.

It is of this Dutchy, and of the *Bress* which has been join'd to it, I intend to speak in this Place. Its antient Dukes have been very powerful, and capable to maintain long and bloody Wars against their Neighbours. They possessed this Province, during very near 600 Years. The last was killed before *Nancy* in 1477. and left but a Daughter, who was married with *Maximilian* Archduke of *Austria*, afterwards Emperor. Therefore *Louis XI.* King of *France*, reunited it to his Crown, as a Masculine Fief.

It extends from East to West more than 30 Leagues, from beyond *Fontaine Francoise* towards *Franche-Comte*, as far as the *Ouaine*, in the *Auxerrois*; and about 45 from South to North, from *Semeur* in *Briennois*, to *Château-Villain* in *Champagne*, without including the *Bresse*, which advances still ten Leagues more towards the South.

It confines Northward with *Champagne*, Eastward with *Franche Comte*, Southward with *Dauphiné*, and the *Lyonnois*, and Westward with the *Bourbonnois* and *Nivernois*.

Its Fertility is well enough known by the great Quantity of excellent Wines, and the good Corn and delicious Fruits it produces. There are found in it several Forests, and other Woods, which abounds with Game of all Sorts; and its fat Pastures feed a vast Number of Cattle.

The largest of its Rivers is the *Saone*; the *Jone* passes in it at *Auxerre*; the *Ain* in the *Bresse*; the *Seine*, the *Armencon*, the *Araux*, and several others spring from it.

In it are distinguished nine small Countries, viz. *Dijonnois*, situated towards the Middle of it, with *Chalonnois* in the Neighbourhood of *Saone*, and the *Autunois*: The Country of *Montagne*, *Auxois*, *Auxerrois*, towards the North: *Charollois* and *Briennois*, with the *Maconnois*, on the *Saone*, towards the South. The *Bresse* is yet more Southward.

DIJON, on the River *Acche*, is the Capital: It is a very antient City, adorn'd with a Parliament, a Generality, and a Mint; but it has no Bishop, and depends of that of *Langres* in *Bassigny*, for the Spiritual.

AUTUN, on the *Arroux*, is an Episcopal City, and very antient, and that of all *France* which has the most beautiful Remains of Antiquity.

BRESSE, to which I'll add the Balliwick of *Gex*, is situated between the *Rhône* and the *Saone*; and divided into two by the River *Ain*, which makes one Part thereof Eastern, and the other Western. In the first are distinguished, towards the South, the *Bugei*; and towards the North, the *Valrourei*; which has the Balliwick of *Gex* at the East, between the Lake of *Geneva*, and *Mont St. Claude*. The other Part, which is of a lesser Extent, contains the City of *Bourg*, which is the Capital of the Province, and of the Diocese of *Lyon*. *Bellay*, Capital of *Bugei*, has a Bishop who styles himself Prince of the Empire.

The PRINCIPALITY OF DOMBES is enclaved in the *Bresse*.

The GOVERNMENT OF BURGUNDY is divided in the following Manner, viz.

DIJONNOIS, contains *Dijon*, *Aussone*, *Beaune*, *St. Jean de l'Aune*, *Citeaux*, Abbey.

AUTUNOIS, contains *Autun*, Bishop. *Bourbon-Lanci*, *Brandons*.

CHALONNOIS, contains *Chalons*, Bishop. *Verdun*, *Bellegarde*.

MONTAGNE, contains *Chatillon*, *Bar-Sur-Seine*, *Aignei-le-Duck*.

AUXOIS, contains *Semeur*, *Avalon*, *Arnay-le-Duck*.

AUXERROIS, contains *Auxerre*, Bishop. *Coulange*, *Crevant*, *Seignelay*.

CHAROLLOIS, contains *Charrolles*, *Paroy-le-Monial*, *Toulon*, *Mont St. Vincent*.

BRINNOIS, contains *Semeur*, *Ansy-le-Duck*.

MASCONNOIS, contains *Mascon*, Bishop. *Tornus*, Abbey. *Chegny*, Abbey.

BRESSE, contains *Bourg*, *Pont d'Ain*, *Pont de vaux*, *Varanben*, *Bugei*, *Bellay*, *Valramei*, *St. Rambert*, *Seifsel*, *Gex*.

PRINCIPALITY OF DANBES, contains *Trevoux*, *Thoissei*, *Chalamont*.

The GOVERNMENT OF LYONNOIS is the most considerable Part of the antient *Celtick Gaul*. In it are included the *Lyonnois*, *Beaujolois*, *Forez*, *Auvergne*, *Marche*, and *Bourbonnois*.

It extends from East to West about 70 Leagues, from *Lyons* as far as beyond the River *Vienne*, at the Extremity of the *Marche*: And more than 50 from South to North, from the Extremity of *Nivernois*, as far as *Neron de la Guierche*, towards *Berry*.

It confines Northward with the *Berry*, and the *Nivernois*; Eastward with the *Bresse* and *Dauphiné*; Southward with the *Cevennes*, and the *Rouergue*; and Westward with the *Quercy*, *Limosin*, and *Angoumois*.

The Soil is not generally fertile every where alike, because of the great Number of Mountains and Forests found in some of its Provinces.

The *Rhône*, the *Saone*, the *Loire*, and the *Allier*, are the most considerable among the Rivers which water the Extent of this Government.

The *Lyonnois* is one of the most agreeable Countries of *France*, being diversified with beautiful Plains, and delicious Hills, which produce very good Corn, excellent Wines, and a vast Quantity of Fruits.

The City of *Lyons* is the Capital, not only of this Country in particular, but likewise of the whole Government *Lyonnois*, it is situated at the Confluent of the *Rhône* and *Saone*; and is esteemed one of the most antient, most trading, and most beautiful Cities of *Europe*. It has an Archbishop, who styles himself *Primate of the Gauls*; it has a Generality, and a Mint.

The *BEAUJOLAIS* is situated Northward of the *Lyonnois*, and inclosed between the *Saonne* and the *Loire*: Its Soil is very full of Mountains, and consequently less fertile. The flat Country produces Corn, Wine, Fruit, Hemp and Meadows.

BEAUJEU, on the *Ardiere*, is the Capital, which has nothing remarkable but a very antient *Bas-Relievo*, which represents the Sacrifice of a Hog, a Sheep, and a Bull, which is seen over the Porch of the principal

Church. The *Romans* called those Sacrifices *Suovetauralia*.

The *FOREZ* is as spacious as the *Lyonnois* and *Beaujolois* put together, and confines with them both Eastward. The *Loire* runs through it from South to North: Its Soil is fertile enough in Corn and Fruit, but it produces little Wine; what it has the most remarkable is the Coal-Pits found in the Neighbourhood of the City of *St. Stephen*, where is fabricated an almost incredible Quantity of hard Wares, there are large Meadows which feed a vast Number of Cattle.

The *Lignon*, and the small River *Donzy*, which disembogue into the *Loire* below *Feurs*, divide it into higher and lower, one Southward and the other Northward.

MONT-BRISON, on the *Verise*, passes for the Capital of the Province, but it borrows its Name from *Feurs* on the *Loire*, which is at present very inconsiderable.

The City of *ST. STEPHEN* is famous for its great Commerce of Cannons, Muskets, Pistols, Swords, Anvils, Files, and all Sorts of Tools.

AUVERGNE, has retain'd the Name of its antient People *Arverni*, of whose Power *Strabo* and *Cæsar* speak, in the Time of their King *Bituitus*, and *Vercingetorix*, who commanded them.

It confines Eastward with the *Forez*; Northward with the *Bourbonnois*; Westward with the *Marche*, *Limosin*, and *Quercy*; and Southward with *Rouergue* and *Gevaudan*.

It is divided into higher and lower, one Southward, and the other Northward; in the first the Soil is very full of Mountains, and less fertile in Corn and Wine, but abounds with Pasture and Cattle. In the Mountains are kept Studs of Horses and Mules, which are sold in *Italy*, *Spain*, and elsewhere. In the last the Soil is fertile in Corn, Wine, Hemp, and Fruit. It abounds with Springs of Mineral Waters; and there is seen a very deep Lake near the *Mont d'Or*, into which if a Stone be thrown, it excites Lightning, Thunder, and Hail. The higher *Auvergne* has no considerable Rivers; the lower is ran thro' from South to North by the *Allier*.

CLERMONT, is not only the Capital of the lower *Auvergne*, but likewise of the whole Province. It is situated on a little Hill between the Rivers *Artier* and *Bedat*. It is an Episcopal See, has a Court of *Aides*, and a Presidial.

RION, is the Capital of the Dutchy of *Auvergne*, it's adorn'd with a Mint, a Generality, and a Presidial.

ST. FLOUR, is the Capital of the higher *Auvergne*, and has an Episcopal See.

MARCHE, is the most western Country of the Government of *Lyonnois*, it borrows this Name from its being an ordinary Passage to the neighbouring Provinces.

It has *Berry* at the North, *Poitou* at the West, *Limosin* at the South, and Eastward it is separated from the *Auvergne* by the small Countries of *Canbrailles* and *Franc-Aleu*, which are properly two of its Members.

The Soil is fertile in nothing else but Grass and Cattle, and produces nothing but Rye and Oats. The Inhabitants carry on a large Commerce of Horses, Oxen, Sheep, and Hogs.

The most considerable of its Rivers are the *Creuse*, the *Gartampe*, and the *Vienne*, which parts it from the *Limosin*.

Marche is divided into higher and lower, one at the South by East, and the other at the North by West.

GUERET, is the Capital of the higher *Marche*, and DORAT is the Capital of the lower.

BOURBONNOIS, has been the Chief and Appennage of the antient and august House of *Bourbon*. It is situated between *Burgundy* and *Berry*, with which it confines, one at the East, and the other at the West; with the *Auvergne* at the South, and the *Nivernois* at the North.

Its

Its Soil is fertile in Rye, Fruit, and Pulse; it abounds in Pastures, Forests, Cattle, and Game. It has very celebrated Mineral Waters.

The *Loire* divides it from *Burgundy* Eastward; the *Allier* and *Cher* run through it from South to North; one towards the Middle, and the other towards the West.

MOULINS, on the *Allier*, is the Capital of the Province, it is adorn'd with a Presidial, and a Generality, and very famous for its Cutlery.

The GOVERNMENT OF LYONNOIS is divided in the following Manner:

LYONNOIS, contains *Lyons*, Arch. *Neuville*, *St. Chaumont*, *Condiece*.

BEAUJOLAIS, contains *Beaujeu*, *Ville-Franche*, *Belleville*.

FOREZ, contains *Mont-brisson*, *Feurs*, *St. Estienne*, *Roannes*.

The HIGHER AUVERGNE, contains *St. Flour*, Bishop. *Aurillac*, *Murat*, *Roquebrac*.

The LOWER AUVERGNE, contains *Clermont*, Bishop. *Rion*, *Thiers*, *Clopiere*, *Monpensier*, *Issoire*, *Brioude*.

The HIGHER MARCHE, contains *Gueret*, *Feletin*, *Jarnage*, *Aubusson*, *Dunaije*, *Genouillac*, *Gramont*, *Abbey*.

The LOWER MARCHE, contains *Dorat*, *Belac*, *Maignac*, *St. Jemien*, *Confolens*, *Lassac*.

BOURBONNOIS, contains *Moulins*, *Bourbon l'Archambault*, *Savigny*, *St. Amand*, *Mont Luçon*, *Varenes*, *Vichy*, *Ainay le vieux*, *Ainay le chasteau*, *St. Geran*.

The GOVERNMENT OF GUIENNE, was antiently called the Kingdom of *Aquitaine*; *Eleonor*, Heiress of this Province, Wife of *Louis the Younger*, King of *France*, having been repudiated, married *Henry* King of *England*, to whom she carried for Dowry *Guienne*, which *Louis* had restored to her. This was a Fire-brand which lighted between those two Crowns, a War which lasted near three hundred Years, and ended in 1453. after the *French* expelled the *English* from it.

Note, That *Guienne* has given to *France* very great Captains, and several Men of Letters; most of its Inhabitants are ingenious, proud, courageous, very dexterous, and very happy in succeeding in what they undertake.

The GOVERNMENT OF GUIENNE, is as spacious as *Orleannois*, since it extends from East to West more than 80 Leagues, from *St. Jean de Bruil*, *Frontiere* of *Languedoc*, to the Sea; and from South to North more than 75 Leagues, from the Port of *Albe* in the *Cominge*, near to *Niort* in *Poitou*.

It confines Northward with *Poitou*, *Angainois*, and *Marche*; Eastward with *Auvergne*, and *Languedoc*; Southward with the *Pyrenean* Mountains, which parts it from *Spain*; and Westward with the Ocean.

The Air in *Guienne* is generally very mild; the Soil fertile enough in Corn, Wine, and Fruits, except towards the *Costes*, and the *Pyrenean* Mountains. There are found in it, almost every where, Springs of hot Mineral Waters.

It is bathed with a great Number of Rivers, the most considerable of which are, the *Garonne*, the *Lot*, the *Dordonne*, *Adour*, and the *Charaut*.

It is divided into two principal Parts, one towards the North which retains the Name of *Guienne*; the other towards the South called in general *Gascony*.

GUIENNE, is distinguished into eight small Countries, viz. *Guienne* itself, and the *Bazadois* in the Neighbourhood of *Garonne*; *Agenois*, *Quercy*, and *Rouergue*, found on the *Lot* in reascending towards its Source; Northward the *Limosin*, at the North of *Dordonne*; *Perigord* in the Neighbourhood of the same River; lastly, *Saintonge* in the Neighbourhood of *Charentes*, and on the Coasts of the Ocean.

GASCONY, is likewise divided into several small Countries, viz. in the Middle is found *Armagnac*, which extends as far as the *Pyrenean* Mountains; towards the North the *Condomois*, and the *Downs*;

Westward the same *Downs*, and the *Land of Labourd*, or Country of the *Basques*; Southward along the *Pyrenean* Mountains, the *lower Navarre*, with the *Viscounty of Soule*, the *Béarn* and *Bigorre*; and Eastward *Cominge*, to which is joined the *Conserans*.

BOURDEAUX, on the *Garonne*, is the Capital of the Government of *Guyenne*: It is very antient, large, beautiful, and a very trading City because of its Port. It is the See of an Archbishop, who styles himself *Primate of Aquitaine*; has a Parliament, a Generality, a Mint, and an University.

The particular *Guyenne*, or *Bourdelois*, is less fertile in Corn than in Wines. The Soil is not equal towards the Countries of *Medoc* and *Buch*, where are found Meadows and Forests of Pines.

BAZADOIS, is fertile enough in Corn, Wine, and Fruit; so that it borrows nothing from its Neighbours.

BAZAS, on the *Vassane*, is the Capital of the Country; and is an Episcopal See.

AGENOIS, is the most fertile Country of *Guyenne*. It furnishes several Provinces with Corn and Wine, and produces a great Quantity of Walnuts; there are but few Meadows in it, but Wood is very common, and at a very low Price.

AGEN, on the *Garonne*, is the Capital, and an Episcopal See.

QUERCY, is divided into higher and lower, one Northward of the *Lot*, and the other Southward. It produces Corn, Wine, Pastures, Fruits, and Saffron.

CAHORS, on the *Lot*, is the Capital, which is a very antient City, and an Episcopal See. It has a Presidial, and a famous University.

The City of MONTAUBAN, is properly in the *Quercy*, but because the greatest Part of its Diocese is in *Languedoc*, it is commonly included in its Government.

ROUERGUE, is divided into three Parts, viz. the County, the *high*, and *low Marche*: The first is in the Middle, the second Eastward, and the third Westward. This Country is full of Mountains; it produces Rye, very little Wheat, and Wine; but Abundance of Fruits: *Roquefort*, is noted for its Cheese.

RHODES, on the *Aveyron*, is receiv'd for the Capital of the Country, and of the whole Province: It has an Episcopal See, and a Presidial.

The *higher* MARCHE has *Milbau* for Capital; and also *Vabres*, which is an Episcopal See.

The *lower* MARCHE, has *Ville-Franche* on the *Aveyron* for Capital, which has a Senechalsey and a Presidial.

PERIGORD, is divided into high and low, call'd also *black* and *white*, one Eastward, and the other Westward. Near *Marsac* there is a Brook which ebbs and flows like the Sea.

PERIGUEUX, on the River *Isse*, is the Capital: It is a very antient City, as it appears by the Remains of an Amphitheatre, and other Monuments of Antiquity: It is adorned with an Episcopal See, and a Presidial.

SAR, Capital of the *lower Perigord*, situated between the *Dordona* and the *Vezere*, is also an Episcopal City.

LIMOSIN, is divided into high and low; one at North by West of the *Vezere*, and the other at its South by East. The first produces but little Wheat and Wine; but it abounds in Rye, Barley, and Chestnuts: The other is more fertile, and produces, in some Places, Wheat and Wine; and abounds in Fruit.

LIMOONS, on the *Vienne*, is the Capital; it is an Episcopal See, and has a Presidial.

TULLES, on the *Couze*, is the Capital of the *lower Limosin*: It is also a Bishop's See, a Senechalsey, and a Presidial.

The *Viscounty of Turenne*, is known there, as well as throughout the whole Kingdom of *France*, by the Name of one of the greatest Heroes that was ever seen in *Mars's* Field.

SAINTONGE abounds in Corn, Wine, and Salt, which is transported into *Spain*, *England*, and other Places.

Places: It produces Fruits, Pasture, and Saffron; and is provided with good Sea-Ports.

SAINTES, on the *Charente*, is the Capital of the Province. The Remains of an Amphitheatre, and some other Monuments of Antiquity, prove it to be a very antient City: It has a Bishop, and a Presidial.

The ARMAGNAC, in general, is fertile in Corn, and excellent Wines; and abounds with Cattle, Fowl, and Game.

AUCHS, on the *Giers*, is the Capital: It has an Archbishoprick, which is worth near 6000 *l.* Sterling a Year.

LEYTOURE, on the same River, is an Episcopal City, and has a Presidial.

CHALOSSE, which the *French* Maps mark for *Gascony*, in particular, is a Country which produces but Rye, Millet, and Pastures.

ST. SEVERT, on the *Adour*, is the Capital; and AYRE, on the same River, is an Episcopal See.

The CONDOMMOIS, produces every Thing necessary for Life, and borrows nothing from its Neighbours.

CONDOM, situated at the Confluent of the Rivers *Baise* and *Gile*, is the Capital, and had once for Bishop the celebrated M. *Benigne de Bossuet*, Tutor of the present King of *France*, Grandfather, *Monsieur*, only Son of *Louis XIV.*

The Downs are in general very sterile; and produce in some Places but Briars, and Pastures: In some others, where they use Marle, they produce Corn, especially Rye.

DAX, or rather AQS, *ab Aquis*, because that City, and its Neighbourhood, abounds with Water, is the Capital of the Downs: It is honour'd with an Episcopal See, a Senechalsey, and a Præsidial.

The Country of LABOURD produces but little Wheat, and Wine, but it abounds with Fruits, of which the Inhabitants make excellent Cyder: It has also several Springs of Mineral Waters.

BAYONNE, on the *Adour*, is the Capital, and is an Episcopal See. Near this City there is a Mountain, from whence there are discover'd four Kingdoms, *viz. France, Spain, Arragon, and Navarre.*

BEARN, has the Glory of having seen born in its Bosom, *Henry the Great*, King of *France* and *Navarre*. This Country is full of Mountains, and in general very sterile: There are some Places, where they gather Wheat, and very good Wine; but those Places are not of a large Extent.

PAU, on the River call'd *Gave Bearnais*, is the Capital of the Province. It is adorned with a Parliament, a Chamber of Accounts, and a Mint.

OLERON, situated at the Confluent of the *Gaves* of *Oleron*, and *Accons*, is an Episcopal City.

L'ESCAR, on *Gave Bearnais*, has likewise its Bishop. MORLAS is a City, which has the Privilege to coin Money.

The Lower NAVARRE, is very full of Mountains, which produces but very little Wine and Corn; but it abounds with Cattle, and Game.

ST. PALAIS, on the *Bedouze*, passes for the Capital of the Province.

The Viscounty of SOULE, which must be included in the Lower Navarre, has but the City of *Mauleon*.

BIGORRE, is very near the same Climate as the Bearn, and produces scarce any Thing but Rye, and Millet. There is found in it Abundance of red Partridges; Mines of several Metals, and Minerals; Springs of hot Mineral Waters, among which those of *Bagnieres* claim the Pre-eminence.

TARBE, on the *Adour*, is the Capital of the Province: It is adorned with an Episcopal See, and a Senechalsey.

COMINGE, in which is included the *Conserans*, is a Country fertile enough in Wheat, Millet, Oats, Wines, Fruits, and Pastures.

ST. BERTRAND, near the *Garonne*, is the Capital: It has a Bishop, who has his Seat in the States of *Languedoc*, because Part of its Diocese is in that Government.

LOMBES, on the *Save*, is likewise an Episcopal City.

ST. LIZER, on the River *Salat*, is the Capital of the *Couserans*.

The GOVERNMENT OF GUYENNE, is divided in the following Manner:

GUYENNE, contains *Bordeaux*, Arch. *Libourne*, *Blaye*, *Esparre*, *Cadillou*, *St. Andreas*.

BAZADOIS, contains *Bazas*, Bishop. *Monsegur*, *Castel-Gelou*, *Alengon*.

AGENOIS, contains *Agen*, Bishop. *Villeneuve*, *Aiguillon*, *Tonneins*, *Foy*.

QUERCY, contains *Cabors*, Bishop. *Gourdon*, *Moissac*, *Figéac*, *Lauferte*, *Cadenac*, *Souillac*.

ROUERGUE, contains *Rhodes*, Bishop. *Vabres*, Bishop. *Milbau*, *Ville Franche*, *St. Antonin*, *St. Just*.

LIMOSIN, contains *Limoges*, Bishop. *Tulles*, Bishop. *Brive*, *Turenne*, *Uzerche*.

PERIGORD, contains *Perigueux*, Bishop. *Sarlat*, Bishop. *Beaumont*, *Bergerac*, *Roche-Chalais*, *Montignac*.

SAINTONGE, contains *Saintes*, Bishop. *Pons*, *St. Jean d'Angely*, *Brouage*, *Barbesieux*, *Aubeterre*.

ARMAGNAC, contains *Auchs*, Arch. *Leytoure*, Bishop. *Vic. d'Armagnac*, *Eause*, *Jegun*, *Naugaro*, *Mirande*, *Verdun*, *Bastide*.

CHALOSSE, contains *St. Sever*, *Ayre*, Bishop. *Gabaret*, *Mugron*, *Arsac*.

CONDOMMOIS, contains *Condom*, Bishop. *Caumont*, *Mont-Real*, *Mont de Marsan*, *Damaran*.

LONDES, contains *Dax*, Bishop. *Tartas*, *Albret*, *Peyrouade*.

The LAND of LABOURD, contains *Bayonne*, Bishop. *St. Jean de Luz*, *Bedashe*, *Guishe*.

The Lower NAVARRE, contains *St. Palais*, *St. Jean Pied de Porte*, *Soule*, *Maubon*.

BEARN, contains *Oleron*, Bishop. *Lescar*, Bishop. *Ortez*, *Navarreins*.

BIGORRE, contains *Tarbe*, Bishop. *Vic. de Bigorre*, *Loarde*.

COMMINGE, contains *St. Bertrand*, Bishop. *Lombes*, Bishop. *Muret*.

COUSERANS, contains *St. Lizer*, Bishop. *Cazeres*.

The GOVERNMENT OF LANGUEDOC, including the *Cevennes*, extends from East to West, about 70 Leagues, from *Villeneuve les Arignon*, to beyond *Rieux* near *Comminge*; and very near 80 Leagues from South to North by East, from *Ax* in the County of *Foix*, to beyond *Annonay* towards the *Lyonnois*; taking up, besides, about 50 Leagues of the Course of the *Rhône*, from North to South.

The RHÔNE separates it, Eastward, from *Dauphiné* and *Provence*: It confines, Northward, with *Auvergne*, *Roüergue*, and *Quercy*; Eastward with *Armagnac* and *Comminge*; and Southward with *Catalonia*, and the *Mediterranean* Sea.

LANGUEDOC, passes for the most agreeable and fertile Province of *France*: The Air is very good, the Soil produces excellent Corn, abounds with delicious Wines, and Fruits are so common, that they grow in the Fields and Hedges: It produces also Saffron, Honey, Wax, and Silk. The Oils of the lower *Languedoc* are very much esteem'd; there is a vast Quantity of Salt made there; Mutton, with which it abounds, is delicious, because Sheep, almost, feed on nothing else but odoriferous Herbs, as Thyme, Lavender, Marjoram, &c. The high *Languedoc* feeds Oxen and Cows, and wants neither Fowls nor Game. There are found every where Mines of Metals, and Minerals; Quarries of Marble, Alabaster, and other Stones of that Nature; Springs of Mineral Waters, &c. Gold and Silver Sand is gather'd in some of its Rivers: In a Word, every Thing that can be wish'd for a pleasant Life, is found in that Province.

The CEVENNES have not the same Qualities; the Soil is very hilly and uncultivated in several Places; in others it produces Wine, Millet, and Fruits; its greatest Fertility is in Pasture, which makes it abound with Cattle, especially Sheep and Mules; Birds of Prey are very common there.

The most remarkable Rivers which water *Languedoc*, are, besides the *Rhône* already mention'd, the *Tarn*, which passes at *Montauban*, and mixes its Waters

ers with those of the *Garonne*, beyond *Moissac*; the *Roir*, which also resorts thither, below *Toulouse*; the *Aude*, which passes at *Carcassone*, and into which the *Fresquel* disembogues, which has been join'd by a Canal, with the *little Lers*, which disembogues into the *Garonne*.

LANGUEDOC, is divided into *high* and *low*, one Westward, the other Eastward on the Mediterranean. The first includes *Toulousin*, *Albigensis*, *Lauragais*, and the County of *Foix*: The other is distinguished into three Quarters, viz. *Narbonne*, *Beziers*, and *Nismes*, which are found in going from West to East.

The CEVENNES, which are Northward of the *low Languedoc*, are distinguished likewise into three Countries, viz. *Gevaudan*, *Vivarais*, and *Vellay*. The first is Westward, the second Eastward along the *Rhône*, and the last Northward of the two others.

The TOULOUSIN, contains the Diocese of *Toulouse*, *Montauban*, and *Lavaur*.

The ALBIGEOIS, extends in those of *Alby* and *Castres*.

The LAURAGAIS, has but that of *St. Papoul*, and some Cities of the others.

In the County of *Foix*, are those of *Mirepoix*, *Rieux*, and *Pamiers*.

The County of NARBONNE, contains the Diocese of *Narbonne*, *Alet*, *Carcassone*, and of *St. Pons de Tarniers*.

The Quarter of BEZIER, extends in those of *Beziers*, *Agde* and *Lodeve*.

And the Quarter of NISMES, contains those of *Nismes* and *Montpellier*.

The GEVAUDAN, extends in the Diocese of *Mende*.

The VIVARAIS, contains those of *Viviers* and *Uzès*.

And the VELLAY has but that of *Puy*.

TOULOUSE, on the *Garonne*, is the Capital of this Government. It passes for one of the most antient, and most beautiful Cities of *France*. It was the Seat of the antient *Tectosagi*, who made so many Conquests in *Asia* and *Greece*. It was one of the *Roman Colonies*, and was afterwards the Capital of the Kingdom of the *Visigoths*; then of that of *Aquitaine*, and lastly, a very powerful particular County. It is at present an Archiepiscopal See, has a Parliament, a Senechal, a Bureau of Finances, a Mint, and an University. It possesses several Monuments of Antiquity, viz. a Capitol, an Amphitheatre, Aqueducts, antient Temples, &c.

ALBY, on the *Tarn*, is the Capital of *Albigensis*; it has a Bishop who is temporal Lord of the City.

CASTELNAUDRY, is the Capital of *Lauragais*.

Note, That near this Place was fought that Battle, where the Duke of *Montmorency*, then Governor of *Languedoc*, who commanded the Forces of *Montsieur Gaston*, *Jean Baptiste*, against those of the King, was unhappily defeated, and taken Prisoner; and from his Prison carried on a Scaffold where he lost his Head; though *Montsieur* gave him his Word of a Prince, he would never listen to any Proposal of Peace, unless he was included in it, but did not accomplish his Promise.

ST. PAPOUL, in the same Province, is a small City which has no other Advantage than that of being an Episcopal See.

FOIX, on the *Ariege*, is the Capital of the County of the same Name.

NARBONNE, is a very antient City, where was established the first *Roman Colony*. It had antiently a Capitol and an Amphitheatre; the Remains thereof are yet seen. It is an Archiepiscopal and Primatial See.

BEZIER, at the Confluent of the *Orb* and *Liron*, is also a very antient City, the Seat of the seventh *Roman Colony*, which gave the Name of *Septimania* to the Province. There are seen yet in it, Remains of a Capitol, and an Amphitheatre. It is honoured with an Episcopal See, and passes for one of the most agreeable Cities of *France*.

NISMES, is likewise an antient City, much beloved by the *Roman Emperors*. It had a *Roman Colony*,

who adorn'd it with a Capitol; there is yet seen in it an Amphitheatre almost whole, and other Monuments of Antiquity. It is at present an Episcopal See.

MONTPELLIER, was almost nothing 700 Years ago, but at present 'tis one of the fairest Cities of *France*. It is honoured with an Episcopal See, a Senechal, a Presidial, and a celebrated University, where the *Medicine* is the most famous Faculty.

MENDE, near the River *Lot*, is the Capital of the *Gevaudan*, and an Episcopal See.

VIVIER, on the *Achasse*, near the *Rhône*, is Capital of the *Vivarais*. Its Bishop styles himself Earl of *Viviers*.

PUY, is the greatest City of *Languedoc*, after *Toulouse*. Its Bishop, who styles himself Count of *Vellay*, of which *Puy* is the Capital, depends immediately of the Pope, and is Suffragan of none of the *French* Archbishops.

ROUSILLON, may very well be placed here; it has about 20 or 25 Leagues from East to West, and very near 20 from North to South. It is situated Southward of *Languedoc*, having the Mediterranean Sea at the East, and *Catalonia* at the South and West.

It is a Country full of Mountains, little fertile in Corn and Wine, but abounding with Pastures.

The most remarkable of its Rivers are, the *Tet*, *Tech*, and *Egly*.

PERPIGNAN, on the *Tet*, is the Capital. It was built of the Ruins of *Rouffillon*, which was a *Roman Colony*. It is at present a very fine City, well fortified, and commanded by a strong Citadel. It is an Episcopal See.

The GOVERNMENT OF LANGUEDOC is divided in the following Manner.

The TOULOUSAN, containing *Toulouse*, Arch. *Montauban*, Bishop. *Lavaur*, Bishop. *Castel-Sarrazin*, *Ville-mur*, *Grijolles*, *Buset*, *Carmaing*.

ALBIGEOIS, containing *Alby*, Bishop. *Castres*, Bishop. *Realmont*, *Gailbac*, *Rabestens*, *Giroussens*, *Valence*, *Cordes*, *Florentin*.

The LAURAGAIS, containing *Castelnaudry*, *St. Papoul*, Bishop. *Avignonnet*, *Ville-Pinte*, *Lauriac le Duc*, *Faujaux*, *Ville-Franche*.

The County of *Foix*, containing *Foix*, *Mirepoix*, Bishop. *Pamiez*, Bishop. *Rieux*, Bishop. *Acqs*, *Mazeres*, *Tarascon*, *Saverdun*, *Maz-d'Azil*, *Mallegonde*, *Hauterive*, *Lerat*, *Puech*.

ROUSILLON, containing *Perpignan*, Bishop. *Elna*, *Salses*, *Collioure*, *Ville-Franche*, *Sello*, *Rivesaltes*, *Stagall*, *Volo*, *Margevol*.

The Quarter of NARBONNE, containing *Narbonne*, *Arèb*, *Carcassone*, Bishop. *Alet*, Bishop. *Limoux*, *St. Pons de Tan*, Bishop. *Leucate*, *Lusignan*, *Capestang*.

The Quarter of BEZIER, containing *Beziers*, Bishop. *Agde*, Bishop. *Pezenas*, *Lodeve*, Bishop. *Clermont*, *Montagnac*, *Port S. Louis*.

The Quarter of NISMES, containing *Nismes*, Bishop. *Montpellier*, Bishop. *Baucaire* (famous for its Fair) *Allais*, *Montferrand*, *Aigues-Mortes*, *St. Gilles*, *Bellegarde*, *St. Laurent*.

CEVENNES, containing *Gevaudan*, *Mende*, Bishop. *Marvejols*, *Florac*, *Bagnols*, *Chirac*, *La Canourgue*.

VIVARAIS, containing *Viviers*, Bishop. *Tournon*, *Annonay*, *Aubenas*, *Privat*, *Joyeuse*, *Uzès*, Bishop. *Villeneuve lez-Avignon*, *Argentiere*.

VELLAY, containing *Puy*, Bishop. *Montfaucon*, *St. Didier*, *St. Paulian*, *Solignac*, *Alegre*.

The GOVERNMENT OF DAUPHINE, extends from East to West about 43 Leagues, from *Pignerol* to *Valence*; and 37 from North to South, from *Lanieu*, on the *Rhône* in *Bresse*, as far as beyond the *Buis* in the *Baronnies*.

Note, That *Dauphine*, which made Part of the antient *Allobroges*, was afterwards comprised in the Kingdom of *Burgundy*, which *Charlemagne* joined to the other Members of the *French Monarchy*. The Emperor *Henry IV.* having quarrelled with Pope *Gregory VII.* was so persecuted by his own Children, that several Lords taking Advantage of their Divi-

vifions, laid hold of each their Part of that Kingdom. *Otho* Earl of *Flanders*, had *Franche-Comte*; *Beraldus* of *Saxony* invaded *Savoy*; *Provence* remain'd to *Berenger*; and *Dauphiné* fell to *Guigue the Fat*, who gave it that Name, becaufe of the Dauphin Earl of *Viennois*, whose Daughter was married to his Son.

IMBERT, or *Humbert*, the laft Earl *Dauphin* of *Viennois*, having loft his Son in the Battle of *Crecy*, and unfortunately let fall his laft, yet an Infant, through a Window, of which Fall he died; feeing himfelf insulted by *Amadeus* Earl of *Savoy*, his irreconcilable Enemy; and not finding himfelf ftrong enough to refift him, refolved to give him a more powerful Neighbour; therefore he offered his Country to *Philip* of *Valois*, King of *France*, and to his Succelfors, provided the eldeft Son of *France* fhould be called *Dauphin*, which was accepted by the King; therefore *Charles V.* *Philip's* Grandfon, was the firft who took the Name of *Dauphin*, in the Year 1350.

DAUPHINE, confines Northward with *Brefse* and *Savoy*, Eaftward with *Piedmont*; and Westward the *Rhône* feparates it from *Languedoc* and *Lyonnois*.

The Soil, though full of Mountains, produces excellent Wines, and good Wheat in fome Places, viz. in the Neighbourhood of *Grenoble*, of *Die*, and along the *Rhône*; but generally it produces Rye, Oats, and Barley. It abounds with Truffles and Cattle, efpecially Sheep, Goats, Hogs, and Mules. The Mountains and Forefts are full of Harts, Deers, Chamas, and Marmotes. The Hares, Pheafants, red and white Partridges, and other Game, are very common in *Dauphiné*. There are feveral Mines of Iron and other Metals. One of the Wonders of the Country is the *Fountain of Vif*, near *Grenoble*, which is always feen boiling, and covered with Flames, without the Water being the leaft hot.

Its largeft Rivers are the *Ifer*, which receives the *Drac* below *Grenoble*; and the *Durance*, which fprings from it, and runs towards *Provence*.

DAUPHINE, is divided into *high* and *low*; the firft, which is Eaftward, includes *Grefvaudan*, *Diois*, the *Baronnies*, *Garencois*, *Embrunois*, and *Brianconnois*. The other which extends Westward along the *Rhône*, includes *Viennois*, *Valentinois*, and *Triafstin*.

The Capital of the whole Country is *Grenoble*, on the *Ifere*, in *Grefvaudan*. It is a very antient City, embellish'd by the Emperor *Gratian*, who gave it his Name. It is honoured with an Epifcopal See, ever fince above twelve hundred Years ago; and adorn'd with a Parliament, and a Mint.

DIE, on the *Draune*, is an antient Colony of the *Romans*, and was antiently the See of a particular Bifhop; but is at prefent united with that of *Valence*.

BUIS, on the *Aurefe*, is the principal City of the *Baronnies*.

GAP, Capital of *Gapençois*, is adorn'd with an Epifcopal See: It has a ftrong Citadel.

EMBRUN, is the Capital of the *Embrunois*: It is very ftrong, being fituated on a very high Rock: It has an Archbifhop, who is at prefent the famous Cardinal *de Tencin*.

BRIANÇON, Capital of *Brianconnois*, is fituated on a very high Mountain, and is an Epifcopal City.

VIENNE, on the *Rhône*, is a very famous City, and very antient, as appears by feveral Monuments of Antiquity, of which there are ftill fome Remains feen. It is an Archbifhoprick.

VALENCE, on the Borders of the *Rhône*, is the Capital of the *Valentinois*: Its Bifhoprick is joined with that of *Die*.

ST. POL. TROIS CHATEAUX, is the Capital of *Triafstin*. It is a Bifhop's See, who ftiles himfelf Earl.

The GOVERNMENT OF *DAUPHINE* is divided in the following Manner.

GRESIVAUDAN, containing *Grenoble*, Bifhop. *Mens*, *Lefaignères*, the Great *Chartreuse*, Prior.

DIOIS, containing *Die*, Bifhop. *Crest*, *Saillans*.

BARONNIES, containing *Buis*, *Nions*, *Merindol*, *Piles*.

GAPENÇOIS, containing *Gap*, Bifhop. *Afpres*, *Ventavon*.

EMBRUNOIS, containing *Embrun*, Arch. *Seyne*, *Guillestre*.

BRIANÇONNOIS, containing *Briancon*, Bifhop. *Exilles*, *Pignerol*, *Peroufe*.

VIENNOIS, containing *Vienne*, Arch. *St. Vallier*, *Romans*, *St. Antoine*, Abbey. *Serre*, *Beaurepaire*, *Tuyllins*, *Tour du Pin*, *Puzignan*, *Vulpilliere*, *Cremieu*, *St. Jean de Bournay*.

VALENTINOIS, containing *Valence*, Bifhop. *Chabeuil*, *St. Marcellin*, *Montelimar*, *Estuille*, *Livron*.

TRICASTIN, containing *St. Paul trois Chateaux*, Bifhop. *Saze*, *Pierrelatte*, *Donzere*, *Grignan*.

The GOVERNMENT OF *PROVENCE*, extends from Eaft to Weft more than 50 Leagues, from the Mouth of the *Var* to the *Rhône*; and from South to North near 40, from *Cape Cerchiez* near *Toulon*, as far as the *Durance*, three Leagues below *Embrun*.

It confines Northward with *Dauphiné*, Eaftward, Part with *Piedmont*, from which it is feparated by the *Alps*, and the River *Var*, and Part with the Mediterranean Sea; and Westward with the *Rhône*, which parts it from *Languedoc*.

The Air and Soil are not equal every where, for towards the North, that's to fay, the higher *Provence*, the Air is cold, as in *Dauphiné*, becaufe of the frequent Mountains always covered with Snow: It produces Corn, but very little Wine. There are fome Fruits, as Apples, Pears, Prunes, Almonds, &c. Its greateft Fertility is in Paftures, and Cattle. In the lower *Provence*, which is towards the Coafts, the Air is mild, and fometimes exceffively hot. The Soil abounds in Corn, delicious Wines, and excellent Fruits; as Olives, Lemons, Oranges, Apricocks, Melons, Figs, Prunes, Almonds, &c. In the lower *Provence* is made the beft Oil in the Kingdom, and very good Salt. Between the Arms of the *Rhône*, towards the Sea, is found a very fat Soil which feeds a great Number of Oxen. There is from Time to Time feen towards the Coafts, fo great a Quantity of Quails, that it is almoft incredible, unlefs one had feen it.

Befides the *Rhône*, *Provence* has for its principal Rivers, the *Durance* which receives the *Verdon*, and the *Hubaye*; the *Argens*, *Var*, and *Arc*, which all three fpring from it. There are feveral Gulphs, as that of *Marfeille*, *Hyerès*, *Grimaut*, *Lerins*, &c. between the *Crau* and *Durance* are found five Lakes.

Note, That there are found on the Coafts of *Provence*, the *Isles Martegue*, *Panegue*, *Hyerès*, or *Stocades*, and *Lerins*, which the famous Count *de Harcourt* conquered with a Handful of Soldiers.

I'll divide *PROVENCE* by its Diocefes; beginning by the Middle, where are found the Diocefe of *Aix*, *Riez*, *Senes*, and *Digne*; the firft in the Neighbourhood of *Durance*, three others in that of *Verdon*, reafcending towards its Source which is in the laft. On the Coafts, the Diocefe of *Arles*, *Marfeilles*, *Toulon*, *Frejus*, *Grace*, and *Vence*; which are found in this fame Order in going from Weft to Eaft. The Diocefe of *Glandeve*, is in the Neighbourhood of *Var*. Northward the Diocefes of *Sifteron*, and *Apt*, with the County *Venaiffain*, which environs the Principality of *Orange*.

Aix, on the River *Arc*, is the Capital of *Provence*, and a very antient City, where *Cajus Sextus* brought a Roman Colony. It is at prefent the See of an Archbifhop, adorn'd with a Parliament, Chamber of Accounts, and a Mint.

ARLES, on the *Rhône*, is a very antient City, where the *Romans* eftablifhed their fixth Colony; and has yet the Remains of an Amphitheatre, which is called the *Arenes*, and of feveral other Monuments. It has an Archbifhop, an Academy of the *Belles Lettres*, affociated with that of *Paris*.

MARSEILLE, is a very antient City, which flourish'd in *Cæsar's* Time. It was a Kind of Commonwealth, and it had a famous Academy. It is at present an Episcopal See; its Port is esteem'd one of the most secure of the Mediterranean; there the *French* Gallies are kept, and is a very trading Place for the *Levant*.

TOULON, is also an Episcopal City, which has one of the best Sea-Ports on the Mediterranean; where the King of *France* keeps several Men of War.

SALON, is a small City, which has the Honour to have produced *Nostradamus*, famous for his *Centuries*.

The County VENESSAIN, depends of the Holy See, ever since the Year 1228. Pope *Clement IV.* having transferred the Pontifical Chair to *Avignon*, in 1305. *Clement VI.* bought that City 38 Years afterwards. And his Successors resided peaceably there, till the Year 1380, and during the Schism till the Council of *Constance*, in 1554.

AVIGNON, on the *Rhône*, which is the Capital, is the ordinary Seat of the Vice-Legate of the Pope, of an Archbishop, of an Inquisition, of an University, and of a Mint to coin the Pope's Money.

ORANGE, with the Title of Principality, is a very antient City, where there was a second *Roman* Colony. There are seen yet the Remains of a Circus, and of a Triumphal Arch. It is the See of a Bishop, Suffragan of *Arles*, of a Parliament, of a Mint, and of an University; it belonged formerly to the most illustrious House of *Nassau*, from whom the late King of *France* bought it.

The GOVERNMENT OF PROVENCE is divided in the following Manner.

The Diocese of AIX, containing *Aix*, Arch. *St. Maximin*, *Brignolle*, *Barjols*, *Peyrols*, *St. Paul*, *Alençon*.

The Diocese of RIEZ, containing *Riez*, Bishop. *Valençole*, *Oréson*, *Palu*, *Mont-pesat*.

The Diocese of SENEZ, containing *Senex*, Bishop. *Castellane*, *Bareme*, *Colmars*, *Mevoiles*.

The Diocese of DIGNE, containing *Digne*, Bishop. *Mirabel*, *Brusquet*, *Collobrioux*, *Verdache*.

The Diocese of ARLES, containing *Arles*, Arch. *Dormet*, *Salon*, *Berre*, *Les Braux*.

The Diocese of MARSEILLE, containing *Marseille*, Bishop. *Aubagnes*, *Oreols*, *Sainte Baume*, *Cioutat*, *Cassis*, *Olliols*.

The Diocese of TOULON, containing *Toulon*, Bish. *Hycres*, *Lomary*, *Pierrefuec*, *Bormes*, *Sifours*.

The Diocese of FREJUS, containing *Frejus*, Bishop. *St. Tropés*, *Draguignan*, *Acelps*.

The Diocese of GRACE, containing *Grace*, Bishop. *Antibes*, *Canes*, *Cipiere*, *Bart*.

The Diocese of VENCE, containing *Vence*, Bishop. *St. Paul*, *St. Laurens*, *Brec*.

The Diocese of GLANDEVE, containing *Glandeve*, Bishop. *Guilleumes*, *Annot*, *Pene*.

The Diocese of SISTERON, containing *Sisteron*, Bishop. *Forcalquier*, *Manosque*, *Brelbane*.

The Diocese of APT, containing *Apt*, Bishop. *Gordes*, *St. Savanin*, *Saut*, *Simiane*.

The County VENAISSAIN, containing *Avignon*, Arch. *Cavaillon*, Bishop. *Carpentras*, Bishop. *Vaison*, Bishop. *Ile*, *Miolans*, *Pont de Sorgue*.

The Principality of ORANGE, containing *Orange*, Bishop. *Courtezon*, *Jouquieres*, *Gigondas*.

ISLES of Martegue, Pomegue, Paulet, Passon.

ISLES STECADES, Ribandon, Ribandas, I. of Titan, I. Porqueyrols, I. Porteros.

ISLES OF LERINS, *St. Marguerite*, *St. Honorat*.

Note, That these two last Isles serve for Prisons for Prisoners of State.

Note also, That before I pass to the Description of *Germany*, it is proper I should speak of the Provinces which serve of common Limits to it and *France*, being situated between those two powerful States. Those Provinces are *Lorraine*, *Franche Comté* and *Savoy*; which are found in this Order

coming from the North towards the South.

LORRAIN, extends from the 27 Deg. 30 Min. of Longitude, to the 29; and from the 47. 30 Min. of Latitude, as far as 49. 30 Min. so that it may have from East to West 40 Leagues from beyond *Biché*, as far as the River *Aixne*, beyond *Sainte Menebou*; and more than 48 from South to North, from the Sources of the *Moselle*, as far as beyond *Saint Vandel*.

Note, That *Lorraine* was the Southern Part of the Kingdom of *Austrasy*, of which it bore the Name, and which *Lotharius* caused to be changed into that of *Lothar-Rich*, whence comes the Word *Lorraine*. *Charles* his younger Son fearing he would not give him an honest Part of his Dominions, threw himself into the Arms of the Emperor *Otho*, who protected him against *Lotharius*, and gave him the Investiture of *Lorraine*, with the Title of Dutchy, on Condition it should releave of the Empire. Thus *Charles* made himself a *German*, and renounced *France*; against which he proceeded with so much Animosity, that the States of the Kingdom considering him not only as a Foreigner, but likewise as an odious Enemy, excluded him from the Crown at the Death of *Louis the Feneant*, his Nephew; and elected in his Place *Hugh Capet*, *Mair du Palais*, and Earl of *Paris*, Chief of the Race of the present Kings of *France*.

LORRAIN, confines Northward with the Diocese of *Treves* and *Luxembourg*, Eastward with the *Palatinate of the Rhine* and *Alsace*, Southward with *Franche Comte*, and Westward with *Champagne*.

The Air is temperate enough, and the Soil fertile enough in Corn, Wine, Hemp, and Pasture. There is found in it a great Quantity of Iron Mines, and some Silver and Copper ones: It abounds with Cattle, and Game. The Rivers are full of Fishes, especially Trout; it has several Forests.

The most considerable of its Rivers are the *Meuse*, *Moselle*, *Sare*, *Meurte*, and the *Saone* which springs from it.

This Province is divided into two Dutchies, viz. LORRAIN and BAR. The first towards the East, in the Neighbourhood of the *Moselle*, of the *Sar*, and of the *Meurte*. The other is towards the West, in the Neighbourhood of the *Meuse*.

The Dutchy of LORRAIN, is subdivided into three Balliwicks, viz. of *Nancy*, of *Vange*, and of *Vaudrevange*; and into three Bishopricks, which are *Metz*, *Toul*, and *Verdun*, which are not properly of *Lorraine*, but are inclosed in it on all Sides.

NANCY, near the *Meurte*, is the Capital of the Province, it has a Chamber of Accompts, and a Senechalsey. It is divided into old and new City; both are very well fortified in the modern Manner. It has no Bishop, but it has a Primate, who has a Right to wear the Mitre.

METS, TOUL, and VERDUN, are Episcopal Sees, and antiently Imperial Towns of *Germany*, whose Bishops are still Suffragans of the Archbishoprick of *Triers*.

METZ, is a very antient City, situated at the Confluent of the *Moselle*, and of the *Scille*, well enough fortified, and commanded by a good Citadel; it was antiently the Capital of the Kingdom of *Austrasy*, and is only at present the Capital of the *Pais Messin*, an Episcopal See, adorn'd with a Parliament, and a Balliwick, established by King *Louis XIII.*

BAR-LE-DUC, is the Capital of the *Barrois*, has a Balliwick, a Senechalsey, and a Chamber of Accompts. The Parliament of the *Barrois* is at *St. Michel*, on the *Meuse*, in the same Province.

Note, That the *Lorrains* are not very ingenious in general, though some of them have been very great Artists in the mechanical Arts, they are parcimonious, presumptuous, and very affectionate to their Prince, which they exalt to the *Apotheose*. It is said that they were tractable enough before the Reduction

of their Country, but ever since they are mistrustful and crafty; and have furnished *France* with a vast Number of Highwaymen.

Lorrain, till of late, has always been govern'd sovereignly by its Dukes, who have been great Captains, and very zealous for the Catholick Religion. The Kings of *France* have been from Time to Time entirely possessed of it; and at present by an Act of Renunciation, made in Favour of that Christian Hero, and true Philosopher, *Stanislaus*, King of *Poland*.—The *Lorrains*, like their Princes, have always been zealous *Roman* Catholicks.

LORRAIN is divided in the following Manner:

The Balliwick of *NANCY*, contains *Nancy*, *St. Nicolas*, *Vaudemont*, *Vezalize*, *St. Diey*, *Luneville*, *Gerbevilliers*, *Blancmont*, *Estival*, *Marfal*, vic. *Moyenvic*, *Salens*, *Naufman*, *Phaltzburg*.

The Balliwick of *VAUGE*, contains *Mirecour*, *Neufchatel*, *Espinal*, *Remiremont*, *Charmes*, *Bruyeres*, *Dompaire*, *Plombieres*, *Fontenoy*, *Darney*.

The Balliwick of *VAUDREVANGE*, contains *Vaudrevange*, *Sirk*, *Sarbruk*, *Dieuze*, *Saralb*, *Putlange*.

The BISHOPRICKS, contain *Metz*, Bishop. *Nomeny*, *Pont-a-Mousson*, *Toul*, Bishop. and County, *Clermont*.

The *BARROIS*, contains *Bar-le-Duc*, *St. Michel*, *Signy*, *Commarcey*, *Vaucouleurs*, *La Mothe*, *Dammarié*, *Châtelet*, *Longuy*, *Villers*.

FRANCHE COMTE, is situated between the 46 and 48 Degree of Latitude; and extends from the 26. 20. Minutes of Longitude, as far as 28. 20. Minutes. So that it may have, from South to North, 40 Leagues, from *Chavannes*, as far as *Mont St. Anne* near *Saonne*; and near 30. from East to West, from the River *Dou*, near *Franquemont*, in the Bishoprick of *Basil*, as far as *Fontaine Française* in *Burgundy*.

Note, That this Province is, as I have already observed, Part of the antient *Cisjurane Burgundy*, which center'd in the Dependencies of the House of *Austria*, by Means of *Mary* Heiress of *Burgundy*, and Wife of the Emperor *Maximilian*. The late King of *France*, who had Pretences on that Province, as on all the Lands which had been alienated from the Crown, took it twice, and restored it once, in Favour of Peace; but has kept it since, both as his Estate, and his Conquest.

Franche Comté confines Northward with *Lorrain*, Eastward with *Switzerland*, Southward with *Bresse*, and Westward with *Burgundy* and *Champagne*.

It is very well peopled, very fertile in Corn, excellent Wines, Woods, Game, and Cattle; it has, like *Lorrain*, very good *Salins*, whence one of its Cities borrows its Name: There are found in it several Quarries of black Marble, and Alabaster.

The most considerable of its Rivers, and large Brooks, are, the *Saonne*, the *Dou*, the *Lougnon*, and the *Louve*, which abounds with excellent Fish.

The Province is divided into three Balliwicks; that of *Vesoul* is in the higher Part, that of *Dole* in the Middle, and that of *Poligny* in the Lower.

Dole, on the *Dou*, is the Capital; is a very antient City, which *Charles V.* caused to be well fortified, after it had been almost entirely newly rebuilt: It was the Seat of a Parliament, of a Chamber of Accompts; and is still of a Balliwick, and of an University.

BEZANÇON, on the same River, is also a very antient City, which heretofore was ranked among the Imperial Cities of *Germany*: It is the See of an Archbishop, who styles himself Prince of the Empire; and is adorned with a Parliament.

Note, That the *Franc-Comtois* are a very good Sort of People; and differ from the *French*, in that they are not so sincere, nor so well polished: They are likewise very zealous *Roman* Catholicks.

FRANCHE-COMTE, is divided in the following Manner:

The Balliwick of *DOLE*, contains *Dole*, *Bezançon*, *Arch. Ornans*, *Quingey*, *Vercel*, *Loye*, *Rochefort*.

The Balliwick of *AMONT*, contains *Vesoul*, *Grey*, *Baume-les-Nonnes*, *Luxueil*, *Rey*, *Jussey*, *Cromarcy*, *Rougemont*, *Lure*, ab Imper. *Mont-Belliard*, Principality.

The Balliwick of *AVAIL*, contains *Poligny*, *Leonsaunier*, *Salins*, *Chastel-Chalon*, *Arley-Bleterans*, *St. Claude*, *Abbey*, *Champagnole*, *Orgelet*, *Pontarlier*, *Noissey*, *Jougne*, *Aranten*, *Mortau*, *Mommoret*, *Sorlin*, *Ruffey*, *Arbois*.

SAVOY, is situated between the 27 and 29 Degree of Longitude, and extends from the 44 Deg. 43 Min. of Latitude, as far as the 46 Deg. 8 Min. Therefore it has about 26 Leagues from East to West, from the Neck of *Cogni*, to *St. Genie of Hoste*, on the *Rhône*; and more than 28 from the Lake of *Geneva* to the Mountains, which separate it from *Dauphiné*.

Note, That this Province is that Country, whose Inhabitants *Cæsar* calls *Allobroges*, *Centrens*, *Latabriges*, &c. it made Part of the *Narbonnoise* and *Celtick Gaul*; and was since one of those which composed the Kingdom of *Burgundy*. It is at present a sovereign Dutchy, whose Dukes, who are of the antient House of *Saxony*, stile themselves Kings of *Cyprus*, ever since *Louis* of *Savoy*, who was married to the only Daughter of *John* King of *Cyprus*: They have also the Title of *Perpetual Vicars* of the Holy Empire in *Italy*, ever since *Amé* the Great.

Savoy confines Northward with the *Rhône*, and the Lake of *Geneva*, Eastward with *Switzerland* and *Piedmont*, Southward with *Dauphiné*, and Westward with the *Rhône*, which parts it from *Burgundy* and the *Bresse*.

The Air is very cold, because of the frequent Mountains, always cover'd with Snow. The Soil produces some Corn, Wine in the Valleys, and on the Hills; but the Mountains have nothing but Pastures, which feed a vast Number of Cattle of all Sorts. It abounds with Game, as wild Boars, Harts, Deer, Marmotes, white Hares and others, white Partridges, Pheasants, and other Fowls. The Lakes furnish fine Trouts, good Pikes, and other Fish. It has several Forests full of Walnut Trees.

Its principal Rivers are, the *Isere*, *Arche*, and *Arve*. It has two Lakes, viz. those of *Bourget*, and of *Annecy*, three or four Leagues long, and one or two broad.

SAVOY is divided into six Parts; three towards the South, viz. what is properly called *Savoy*, *Maurienne*, and the *Tarentaise*: And three others towards the North, viz. the *Genevois*, *Faulsigny*, and *Chablais*.

CHAMBERY, situated on the Confluent of the small Rivers *Laisse* and *Albane*, is the Capital of *Savoy*; and is adorned with a Parliament or Senate, a Chamber of Accompts, a Bureau of Finances, and a Balliwick. It depends for the spiritual, of the Bishoprick of *Grenoble*.

Note, That the *Savoyards* are not very great Wits, nor very dextrous; but they are very good, meek, courteous to Foreigners, affable, sincere, and have so advantageous an Opinion of their Duke, that they believe him the greatest Prince upon Earth. The Gentlemen have something very great and noble; but the common People are cringing, and do not love War, though they are very capble to support all Sorts of Fatigues: They are in general very parcimonious, and very sober.

Their Duke is, as I have observed before, a Prince of the illustrious House of *Saxony*, who is stiled Royal Highness; at present King of *Sardinia*; he keeps a Governor at *Chambery*, because himself keeps his Court at *Turin* in *Piedmont*, being Prince thereof. He is a zealous Professor of the Catholick Religion, though in the Neighbourhood of Countries, where *Calvinism* is strongly established. He has an Archbishop in the City of *Monstiers*, in the *Tarentaise*, a Bishop at *St. John de Maurienne*, and the

the Bishop of Geneva who presides at *Annecy*.

SAVOY is divided in the following Manner.

The Proper SAVOY contains, *Chambery, Montmellian, Beaufort, Aix, Rumilly, Echelles, Ugine, Conflans, Aiguebelle, Miolans, Chatelar, Rochette*.

In BUGEI, *St. Genis D'Hoste, Montaleon, Jenne*.

MAURIENNE contains, *St. John de Maurienne, Bishop. La Cambre, St. Michel, St. Julian, St. Andre, Modane, Lanebourg, Braman, Uffe*.

The GENEVOIS contains, *Annecy, Alby, Roche, Tonnes, Faverge, Manigo, Talloir, Clairmont, Mont St. Martin*.

The TARENTEISE, contains *Monstiers, Arch. St. Jacques-Eme, St. Maurice, Briançon*.

The FAUSSIGNY, contains *Cluse, Salanche, Bonneville, Taninge, St. Gervaise*.

The CHABLAIS, contains *Tonnon, Ripaille, Evian, Armoy, St. John de Lux*.

Note, That I'll conclude this Article of France, and of its Frontiers, by observing that there is but one Religion professed publickly throughout that vast Kingdom, which is the Catholick; that the French Monarchs, ever since the Conversion of Clovis I. to Christianity, have professed no other; having always been zealous Protectors and Defenders of the Roman Church, for which they have merited from the Popes, who have always had Recourse to them in their greatest Distresses, the glorious Title of MOST CHRISTIAN KING.

Note also, That the King of France provides in his Dominions (the Conquests excluded) to eighteen Archbishopsricks, a hundred and ten Bishopsricks, to seven hundred and fifty Abbeys of Monks, without reckoning those who have been re-united to other Commonalties or Benefices; and to more than two hundred Abbeys of Nuns.

The Eighteen ARCHBISHOPRICKS, are, *Aix, Alby, Ambrun, Arles, Auch, Besançon, Bourdeaux, Bourges, Cambrai, Lyons, Narbonne, Paris, Rheims, Rouen, Sens, Toulouse, Tours, Vienne*.

The Hundred and Ten BISHOPRICKS, are, AGDE, *Agen, Air, Alet, Amiens, Angiers, Angoulême, Apt, Arras, Avranche, Autun, Auxerre; BAYEUX, Bayonne, Bazas, Beauvois, Bellay, Bethléem, Beziers, Blois, Boulogne, St. Bricu; CAHORS, Carcassone, Castres, Châalons, Châlons, Chartres, Cisteron, Clermont, Cominges, Condom, Cornouaille, Conserans, Coutance; DAX, Die, Digne, Dole; EVREUX; S. FLOUR, Frejus; GAP, Geneve, Glandeve, Grace, Grenoble; KEBEC; LAITOUR; Langres, Lâon, Lavaur, Leon, Lescar, Limoges, Lisseux, Lodève, Lombes, Luçon; MAACON, S. Malo, Mande, Mans, Marseille, Meaux, Metz, Mirepoix, Montauban, Montpellier; NANTES, Nevers, Nice, Nîmes, Noyon; OLERON, S. Omer, Orange, Orleans; PAMIEUX, S. Papoul, S. Paul trois Châteaux, Périgueux, Perpignan, Poitiers, S. Pol de Leon, S. Pons de Tanieres, Puy; RENNES, Ricux, Riez, Rochelle, Rodez; SAINTES, Sais, Sarlat, Senez, Senlis, Soissons, Strasbourg; TARBES, Toul, Toulon, Tournay, Trequier, Troyes, Tulles; VABRES, Valence, Vannes, Vence, Verdun, Viviers, Usaiz*.

Besides these, there are also in the Kingdom of France, several Dignities of the ORDER of MALTA, as *Grand Priors, Commanders, and Knights*, who are all of the Body of the Clergy; and that most noble, and illustrious Order, being divided into eight Nations, the Kingdom of France has the Advantage to have the three first, viz.

PROVENCE, whose Chief is *Grand Commander* of the Order.

AUVERGNE, whose Chief is *Grand Marschal* of the Order.

FRANCE, whose Chief is *Grand Hospitalier* of the Order.

G E R M A N Y.

From France I'll pass into GERMANY, which is situated in the Middle of Europe, between the 24. and

41 Deg. 30 Min. of Longitude, extending from 45 Deg. 30 Min. of Latitude to 55; so that it may have 240 Leagues from East to West, from beyond the Source of the *Vistula*, to *Beauzains* in *Artois*; and near 200 from South to North, from the Lake of *Locarne*, near the *Milanese*, to the *Baltick*.

Its Limits, Northward, are the *Ocean, Denmark*, and the *Baltick*; Eastward, *Poland* and *Hungary*; Southward, *Italy*; Westward, *Savoy, Franche Comté, and Lorrain*, which parts it from *France*.

GERMANY is very fertile in all Things, particularly towards the South, in the Neighbourhood of the *Danube*; where the Air is as temperate as it is in *France*; but northward the Climate is very cold, and the Soil less fertile; which, notwithstanding, there are found every where, beautiful and large Cities well inhabited, and very trading.

It has six principal Rivers, viz. the *Danube*, the *Rhine*, the *Meuse*, the *Weser*, the *Elbe*, and the *Oder*: With some others less considerable, as the *Drave*, the *Save*, the *Inn*, the *Mein*, the *Sprée*, the *Muer*, &c.

GERMANY has always been divided into *High* and *Low*. The first is Southward, and contains *Austria*, and its Dependencies, *Bavaria, Suabia, Switzerland, Alsace*, the *Low Palatinate*, with the fourth Part of *Franconia*.—The other, which is Northwards, contains *Bohemia* and its Dependencies, the other Part of *Franconia*, *Hesse*, the high and low *Saxony, Westphalia*, the *Electoral Archbishopsricks*, the Succession of *Cleves* and *Juliers*, and the *Low Countries*: Some add to it formerly *Prussia* and *Livonia*; which I'll mention in the Article of *Sweden*.

It is again divided politically into ten Circles: The first is that of *Franconia*; the second of *Bavaria*; the third of *Austria*, to which might be added, *Bohemia* and its Dependencies, to avoid dividing the Dominions of the House of *Austria*; the fourth of *Suabia*; the fifth of *Alsace*, or rather of the high *Rhine*, containing the Landgravate of *Hesse, Alsace*, the Dutchies of *Deux Ponts*, and *Fimmeren*, the States of the Bishops of *Wormes, Spire*, and *Basle*; the Duchy of *Savoy*, included in it at present, but improperly; the sixth that of the low *Rhine* or Electoral, containing the Dominions of the Elector *Palatine*, and of the Electoral Archbishops; the seventh, that of *Westphalia*; containing, with that Province, the Dioceses of *Cambrai, Liege, Ferden*, with the Succession of *Cleves* and *Juliers*; the eighth, is called the high Circle of *Saxony*; which contains with the high *Saxony*, and its Dependencies, the Dominions of *Brandebourg* and *Pomerania*; the ninth, is called the low Circle of *Saxony*; which contains all the low *Saxony*.

For my Part, I'll divide Germany into eighteen principal Parts; four whereof are found Southward, viz. *Austria* and its Dependancies, *Bavaria, Suabia*, and *Tyrol*; the three first are situated in the Neighbourhood of the *Danube*, the last is Southward of *Bavaria*, and *Suabia*; in the Middle are found *Franconia, Hesse, Bohemia*, with its Dependencies, and high *Saxony*; Northward, are found *Brandebourg, Pomerania, low Saxony*, and *Westphalia*; Westward, on the *Rhine*, beginning at its Mouth, or rather where it ends, and re-ascending always towards its Source, are first the *Low-Countries*, then the Succession of *Cleves* and *Juliers*, with the *Electoral Archbishopsricks*, the low *Palatinate, Alsace*, and *Switzerland*.

VIENNA, in *Austria*, situated on the *Danube*, is reputed the Capital of Germany, because the Emperors of that illustrious House used to keep their Court there. It has a Bishop Suffragan of *Salzburg*, and an University. It is a very strong City, which the *Turks* have often besieged in vain, though once with an Army of 300,000 Men, commanded by one of their greatest Heroes, *Soliman* the Magnificent.

RATISBON, an Episcopal City also, situated on the *Danube* in *Bavaria*, is the Place where the Diets of the Empire are kept.

FRANCFORT on the *Mein*, in *Franconia*, is the Place where the Emperor is elected.

AIX LA CHAPELLE, in the Dutchy of *Juliers*, is the Place of his Coronation.

Note, That the *Germans* are not supposed to be furnished with a vast deal of Wit (though I have found the contrary) but they are very good Artists, liberal, noble, brave, good, sincere, and very sociable; they are for the generality very handsome, and of a strong Constitution. They love naturally War, and good Cheer; but they are not esteemed the best civilized People in *Europe*; which is but a very insignificant Imperfection, when compared with their excellent Perfections.

Note also, that the Empire of *Germany* is composed of five Sorts of Powers, *viz.* the Emperor, who is Chief, but not Master, since he can dispose of nothing but his own: The Electors to the Number of nine, *viz.* the Archbishop of *Mentz*, High Chancellor of the Empire in *Germany*: The Archbishop of *Triers*, High Chancellor of the Empire in *Gaul*: The Archbishop of *Cologne*, High Chancellor of the Empire in *Italy*: The King of *Bohemia*, Great Cup-Bearer: The Duke of *Bavaria*, High Steward: The Duke of *Saxony*, Grand Marshal: The Marquis of *Brandebourg*, Grand Chamberlain: The Count *Palatine* of the *Rhine*, High Treasurer: The Duke of *Hanover*; call'd likewise High Treasurer: The ecclesiastick Princes; the secular Princes; the Free-Towns, which are as many Republicks; some of those Towns, or Cities, are call'd Imperial, and appear at the Assemblies, or Dyets, on the Benches of *Suabia* and of the *Rhine*: Others are call'd *Hanse* Towns, and appear under four Colleges, whose Seats are *Lubeck*, *Cologne*, *Brunswick*, and *Dantzick*: These Towns have receiv'd the Name *Hanse*, from the German Words, *An zee Stette*, i. e. Cities situated on the Sea; because the first which began the Confederacy were all situated on the Sea, or at least on some considerable Rivers: They formed this Confederacy, to maintain themselves mutually in Trade; and they had once Compting-Houses in common, *viz.* one at *London*, in *England*; one at *Bruges*, in *Flanders*, and afterwards at *Antwerp*; one at *Novogrod* in *Muscovy*, then at *Revel* in *Livonia*, and afterwards at *Narva*; and the other at *Bergen* in *Norway*.

The *German* Powers depend no otherwise of the Emperor, than by doing Homage to him; otherwise, they can make War, Alliances, and Confederacies with foreign Princes, provided they do not prove prejudicial to the Empire.

Note, besides, That there are three Religions professed publicly in *Germany*: The first is the *Catholick*, professed by the Emperor himself, at present by all the Electors except two, (who are those of *Brandebourg*, and of *Hanover*) and by a great Number of Princes: The others are the *Lutherans*, and the *Calvinists*. There are also found in some Places, *Zuinglians*, *Anabaptists*, and *Jews*.

I'll begin my Division of *Germany*, by the Description of the Provinces belonging to the House of *Austria*, which compose those Dominions, commonly call'd *Austriche*, or *Austria*.

AUSTRICHE, OR AUSTRIA.

The Provinces known under that general Name, are the particular *Austria*, *Carinthia*, *Stiria*, and *Carniole*: The first is situated in the Neighbourhood of the *Danube*; the second, and third, are Southward of it, in the Neighbourhood of the *Drave*, one Westward, and the other Eastward; and the last, is still further advanced than these, towards the South, in the Neighbourhood of the *Save*.

They have for Bounds, Northward, the Mountains of *Bohemia*, and the River *Teya*; Eastward, *Hungary*; Southward, *Italy*; and Westward, *Tyrol* and *Bavaria*.

The particular *Austria*, is the sole Archduchy of *Europe*, which has about 52 Leagues from East to

West, and 25 from South to North.

Its Air is mild, and wholesome; it is extremely fertile in Wine; and produces likewise Wheat, Saffron, and Wood.

Carinthia, *Stiria*, and *Carniole*, may contain together 65 Leagues, in Length from East to West, and 48 from South to North.

Though the Soil, in these Provinces, be full of Mountains, it notwithstanding produces Corn enough, and very little Wine, but it is delicious: There are found in them Mines of several Metals; and they abound with Cattle.

Besides the *Danube*, which runs thro' *Austria* from West to East, there is but the River *Ens*, which is a little considerable in that Province; where it comes to disembogue, after it has passed thro' a City which borrows its Name. The Rivers *Drave*, and *Muer*, spring from *Carinthia*, passes into *Stiria*, and crosses them both from West to East. The *Save*, which takes its Source in *Carniole*, divides it into two Parts, by its Course on the same Side. These Rivers are so rapid, that they dim the Sight of those who look at them too earnestly. In the Southern Part of *Carniole*, called *Seiche*, is found the Lake *Czirknickz*, environed with Mountains and Forests, which is full of Water about the latter End of Autumn, and dry in the Spring; so that those who live in the Neighbourhood of that Lake, hunt, sow, and reap in it; before the Waters return into it from certain subterraneous Sources.

AUSTRIA is divided into *higher* and *lower*, one Westward, the other Eastward. *Carniole*, besides its Division into two Parts, contains the Marquisat of *Windes*, and the County of *Cillej*.

VIENNA, on the *Danube*, is the Capital of the Archduchy of *Austria*.

The City of ST. WEIT, situated on the Confluent of the Rivers *Glan* and *Williez*, is the Capital of *Carinthia*.

GRATZ, on the *Muer*, is the Capital of *Stiria*.

LAUBACH, situated on the River of the same Name, is the Capital of *Carniole*.

METLING is the Capital of the Marquisat of *Windes*, commonly called *Wineismarck*. The City of *Cillei* is the Capital of its County.

Note, That the House of *Austria*, on which all these Dominions depend, is very antient, and has given an Emperor to *Europe*, more than 400 Years ago. For *Rodolphus* I. who is the Source thereof, was raised to that supreme Dignity in 1273. It seems as if the Empire had been hereditary in that illustrious House, for more than 200 Years. But that dearly beloved Prince *Charles* VI. the late Emperor, dying without Issue Male, that Empire has been transferred with the free and unanimous Consent of all the Electors, into that of *Bavaria*.

The *Catholick* Religion is professed with a great deal of Zeal (the Princes themselves giving the Example) in all the Dominions depending of the House of *Austria*, and the Inquisition banishes from it all new Doctrines.

Note also, That as *Tyrol* is also of the Dependencies of the House of *Austria*, it is proper to make here the Description thereof, without deviating from my Subject; it being besides more Southern than the two others which precede it in the Division of *Germany*.

TYROL is the greatest County in *Europe*; for it has very near 25 Leagues from South to North; and near 44 from East to West.

It confines Northward with *Suabia* and *Bavaria*; Eastward with *Carinthia*; Southward with *Italy*, and the *Grisons*; and Westward with *Switzerland*.

Its Climate is not equally temperate every where, nor its Soil generally fertile, because of the frequent Mountains which are almost always covered with Snow. It produces very good Corn, and very good Wine, but in a little Quantity. Its greatest Fertility is in Pastures. There are found in it Mines of Silver, Copper,

Copper, and Iron, and Mineral and salt Waters.

The River *Inn* runs through it from South to North by East; and the *Adige* which passes in the Territories of *Venice*, springs from it.

Innsbruck on the *Inn*, is the Capital; the Archdukes have chose it sometimes for their Residence, and have even been called *Archdukes* of *Innsbruck*.

To acquire a more particular, or circumstantial Knowledge of the Estates belonging to the House of *Austria*, we must enter into the following Detail:

AUSTRIA, contains *Vienna*, Bishop. *Newstat*, *Leichenstein*, *Thurn*, County. *Melk*, *Losenstein*, County. *Ens*, *Steyr*, *Krems*, *Horn*, *Harduck*, County.

TYROL, contains *Innsbruck*, *Briten*, Bishop. *Tirol*, County. *Miran*, County. *Bolzan*, *Landuck*, *Kustain*, *Hall*, *Bregentz*, *Pfanenberg*, County. *Montfort*, County. *Pludentz*, *Hoben-Ems*, Lordship.

CARINTHIA, contains *S. Weit*, *Clagenfurt*, *Villach*, *Arnstein*, *Ortemburg*, *Draburg*, *Gurk*, Bishop. *Muraw*, *Lavemund*, Bishop.

STIRIA, contains *Gretz*, *Rakelsburg*, *Warasdin*, *Pettau*, *Marckepurg*, *Judenburg*, *Pruk*.

CARNIOLE, contains *Laubach*, *Billigratz*, *Crainburg*, *Czirknikz*.

WINDISMARCK, contains *Melling*, *Rudolfwert*, *Gilley*, County.

B A V A R I A.

Some Authors pretend, that *Bavaria* was antiently a Kingdom, before *Charlemagne* had reunited it to his Crown: But, however, it is very true, that *Louis*, Son of *Louis the Gentle*, Emperor and King of *France*, was the first of the *Carlman* Race stiled King of *Bavaria*, which was afterwards changed into that of King of *Germany*, under the Reign of *Charles the Gros*, Emperor; that is to say, 65 Years afterwards: Therefore it was insensibly alienated from the Crown of *France*, and reduced into a Dutchy, which has given Emperors to the West; as it does at this present Time.

BAVARIA, has about 42 Leagues in Length, from East to West; and 62 from South to North.

It confines Eastward with *Bohemia*, and *Austria*; Southward with *Carinthia*, and *Tyrol*; Westward with *Suabia*, and *Franconia*; and Northward touches *high Saxony*.

The Climate of *Bavaria* is very wholesome; and though the Soil be full of Forests and Mountains, it produces a great Quantity of Wheat, and but very little Wine: There are found in it Mines of Gold, Silver, Copper, &c. and it abounds in Cattle and Game.

Besides the *Danube*, which runs through it from West to East, the most considerable Rivers are the *Lech*, which parts it from *Suabia*; the *Amber*, *Iffer*, *Inn*, and the *Saliz*; which with the Lakes of *Amberzee*, and *Chiemzee*, bathe the Dutchy: The *Altmul*, *Nab*, and *Regen*, run into the *Palatinate*.

I had forgot to observe, that the *Danube* running through the Middle of *Bavaria*, divides it into two Parts; one whereof, which is Southward, is call'd *Dutchy*; and the other, which is Northward, *Palatinate*; with the Surname of *high*, to distinguish it from that of the *Rhine*, which is called the *low Palatinate*.

MUNICH, on the *Iffer*, is the Capital of the Dutchy, and where the Elector keeps his Court.

RATISBON, on the *Danube*, includes six Principalities: First the City, which is Imperial; the Bishops; the Abbots of *St. Emeron*, and of *St. Cornelis*; and the Abbeesses of the *high* and *low Montier*.

The Duke of *Bavaria* is not sole Sovereign in this Province; there are with him particular Lords, and free Cities. This Prince was made an Elector in the room of the Elector *Palatine* of the *Rhine*, put to the Ban of the Empire, for the Affair of *Bohemia*, as I'll relate in its proper Place.

Note, That the *Catholick* is the reigning Religion in *Bavaria*, though *Lutherans* and *Calvinists* are found in some Places.

S U A B I A.

This Province which makes Part of the Country of the antient *Sueves*, is a Dutchy which has given Emperors to the West: It may have 45 Leagues in its greatest Extent from East to West; and 41 from South to North.

It has for Bounds, Eastward *Bavaria*; Southward *Tyrol*, and *Switzerland*; Westward, *Alsace*; and Northward, the *Palatinate of the Rhine*, and *Franconia*.

Its Climate is very near like that of *Bavaria*; except that it is more fertile in Wine.

The *Danube* springs from it, and runs through it from South by West, to North by East. Its other Rivers are the *Iffer*, the *Nekar*, &c.

There is no Country which contains so many Sovereignities as this does; for in the single City of *Augsbourg* there are four Principalities, viz. the City which is imperial; the Bishop who resides at *Delling*; and the Abbots of *St. Ulrick*, and of *St. Afre*; besides these, there are the Abbots of *Coire* and *Constance*; sixteen Abbots; five Abbeesses; three secular Princes, who are the Dukes of *Witttemberg*, *Stutgard*, and *Montbelliard*; the Marquis of *Baden*, and *Durlach*; eight Counts; five Barons; the Grand Prior of *Malta*; the Provost of *Vetenhausen*; and thirty-four imperial Cities.

AUGSBOURG, on the *Lech*, is the Capital. It has a Bishop who resides at *Dilleng*. It is famous for the Profession of Faith of the *Lutherans*, who are very numerous at *Augsbourg*.

A more particular Detail of *Bavaria*, and *Suabia*, is as follows.

The Dutchy of *BAVARIA*, contains *Munich*, *Salzburg*, Arch. *Passaw*, Bishop. *Ratisbon*, Bishop. *Freyzing*, Bishop. *Bertogaden*, Prevostry. *Hag*, County. *Ortembourg*, County. *Castel*, County. *Ingolstadt*, *Kelheim*, *Landshut*, *Landsparg*, *Furstanfeld*, *Burchausen*, *Chiemzee*, Bishop. *Straubing*, *Masprug*.

The *Palatinate* of *BAVARIA*, contains *Amberg*, Prefect. *Richstet*, Bishop. *Newbourg*, D. *Sultzbach*, Lordship. *Luchtemberg*, Landgr. *Chamb*, County. *Newmarck*.

SUABIA, contains *Augsbourg*, Bishop. *Constance*, Bishop. *Kempten*, Abb. *Reichenaw*, Abb. *Zollern*, *Witttemberg*, D. *Stutgard*, Dutchy. *Tubingen*, County. *Furtemberg*, Princip. *Burgaw*, M. *Pappenheim*, B.

IMPERIAL CITIES:—*Ulm*, *Donawert*, *Weissenburg*, *Nortlingen*, *Gemund*, *Hall*, *Roteveil*, *Retling*, *Hailbrun*, *Esling*, *Lindaw*.

FOREST CITIES:—*Rheinfeld*, *Sekingen*, *Lauffenberg*, *Waldshut*.

F R A N C O N I A.

Most Authors are of Opinion, that this Province was the antient Habitation of the *French*, in the Time of *Pharamond* their first King, who was born in it; and say, that the *Salick* Law observed in *France* with respect to the Succession to the Throne, was made near the River *Sala*, whence it borrows its Name.

FRANCONIA, may have 50 Leagues from East to West; and 37 from South to North.

It is situated in such a Manner, that it is bounded by *high Saxony* at North by East; the *Palatinate* and *Bavaria* at the East; *Suabia* at the South; the *Palatinate* of the *Rhine* at the West; and the *Hesse* at North by West.

This Country is environed with Forests, and Mountains, rocky, and uncultivated: But in the Middle it is agreeable and very fertile in Corn, Wine, and Pastures.

The most considerable of its Rivers, are the *Mein*, the *Tauber*, the *Regnitz*, and those of *Pegnitz*, and *Sala*.

Note, That the Emperor *Charlemagne* had formed the Design to join the Ocean and the Black Sea, by a Canal he had began near *Anspach*, from the River *Rednitz* which falls in the *Mein*, to the *Altmul*, which

which disembogues in the *Danube*; but the pressing Affairs which called him to *Italy*, and the continual Rains which happen'd at that Time, hinder'd the Execution.

Note also, That the Bishop of *Wirtzburg*, stiles himself Duke of *Franconia*, though he has not a greater Part of it than several Sovereigns among whom it is divided. Several Archbishops of *Mentz*, have been successively Bishops of *Wirtzburg*, and stiled themselves Dukes of *Franconia*.

The City of *WIRTZBOURG*, on the *Mein*, might pass for the Capital of *Franconia*, because of the Quality of its Bishop.

NUREMBERG, on the River *Pignitz*, is very famous for the Fairs kept there; and for its great Commerce.

Note, That the Diversity of Sovereigns, causes in *Franconia* a Diversity of Religion; for there are found in it *Catholicks*, *Lutherans*, *Calvinists*, and *Jews*, who are in great Numbers at *Francfort* on the *Mein*, which is likewise a City famous for its Fairs.

H E S S E.

The Country we know under the Name of *Hesse*, does not contain only the Landgraviate of *Hesse*, but likewise several Principalities and Lordships; as the *Wateran*, *Westerwald*, the Counties of *Nassau*, of *Hannau*, of *Solms*; of *Isembourg*, of *Waldeck*, &c.

Its greatest Extent, from East to West, is of about 40 Leagues, and from South to North of 34.

It confines Eastward with *high Saxony*; Southward with *Franconia*, and the Archbishoprick of *Mayence*; Westward with those of *Triers*, and *Cologne*, and the Dutchy of *Bergue*; lastly, Northward with *Westphalia*.

The Climate is wholesome, the Waters very good, and the Soil, though full of Mountains and Forests, produces Corn, and Wine, near the *Rhine*, and the River *Loen*.

The particular *HESSE* is divided into two Landgraviates; one in the Neighbourhood of the Rivers *Eder* and *Loen*; the other in the Neighbourhood of the *Werre* and *Fulde*.

MARPURG, on the *Loen*, is the Capital of the first, and was once the Place of Residence of the Landgrave of the same Name.

CASSEL, on the *Fulde*, is the Capital of the last, and of the Landgrave of the same Name.

Note, That the Inhabitants are *Lutherans*; and the Subjects of the Landgrave of *Hesse Cassel*, *Calvinists*; and thus of all the others, each in Imitation of their respective Sovereign.

A more particular Description of *Franconia* and *Hesse*, is as follows.

FRANCONIA, contains *Wirtzburg*, Bishop. *Francfort*, Imper. *Aschaffenberg*, Lor. County. *Schwinfort*, I. *Hamelburg*, *Königsbaven*, *Henneberg*, County. *Smakalden*, *Coburg*, Dutch. *Culmbach*, M. *Staffelstein*, *Pegnitz*, *Bamberg*, Bishop. *Forchheim*, *Nuremberg*, I. *Anspach*, M. *Rotenberg*, I. *Weikersheim*, *Winsheim*, I. *Mariendal*, *Sensheim*, County. *Erpach*, *Marienberg*, *Castel*, County. *Breit*.

HESSE, contains *Marpurg*, Landg. *Wetzlar*, I. *Glenhausen*, I. *Ortenberg*, *Fridberg*, I. *Nassau*, County. *Catznelbogn*. *Weilburg*, *Hanau*, County. *Hadamars*, County. *Wielde*, County. *Sigen*, County. *Salsens*, County. *Witgentrin*. County. *Battenberg*, B. *Cassel*, Landg. *Hirschfeld*, Ab. *Fuld*, Ab. *Frillard*, Lordship. *Valestein*, Lordship. *Zigenheim*, *Waldeck*, County. *Carbach*, *Rodenburg*, *Allendorf*, *Eschwege*, *Grebenstein*, *Witzenhausen*.

B O H E M I A.

I understand by the Name of *BOHEMIA*, not only the particular Kingdom of *Bohemia*, but likewise the Marquitate of *Moravia*, and the Dutchy of *Silesia*, which together make up the most spacious Part of *Germany*, having more than 94 Leagues from East to

West, and near 72 from South to North.

It confines with *Poland* Eastward, with *Hungary* and *Austria* Southward, with the Palatinate of *Bavaria* South by West, and with *High Saxony* at North by West.

The Climate is generally very unwholesome, and subject to the Plague, though it be cold. Its Soil is fertile in Wheat, Pasture, and Saffron; but produces no Wine. Its Mountains, which are in great Number, have Mines of Gold, Silver, Copper, and Lead: Its Rivers are full of Fish.

Note, That the *Bohemians* are very crafty, and of a strong Constitution: They are great Epicures, and great Dunkards, talk much, bold, and so great Thieves, that it is not safe to walk the Streets of *Prague* in the Night-Time; those Streets being then lin'd with Thieves. The Country is as dangerous for Travellers, unless they travel in Companies of twenty or thirty; I except from this Number the Nobility, which I know by Experience, that, far from being addicted to any of those scandalous Vices, possess on the contrary, in an eminent Manner, all the Virtues and Perfections opposite to them.

Note also, That the House of *Austria*, had rendered all those Countries hereditary to herself, and was in Possession of them all, at the Death of the late Emperor, except some of the most northern Territories in *Silesia*, which belong to the Elector of *Brandebourg*, and to another Marquis of the same Name; but at present there are several Claims which are not adjusted.

The *Catholic* Religion, is the reigning one in the Kingdom of *Prague*, and its Dependencies. Before the Battle of *Prague*, there were about twelve Sorts of different Opinions professed in the Kingdom, all contrary to the *Roman* Church, but ever since that Time, the Emperor has almost entirely extirpated them. There are yet *Jews* in *Prague*, who have the free Exercise of their Religion, and some other Privileges, which they have bought at a dear Rate.

The most remarkable of its Rivers, are the *Elbe*, the *Sarawe*, the *Wultaw*, the *Moldau*, the *Miza*, and the *Eger*, &c.

The Kingdom is divided into seventeen Prefectures, which are *Prague*, *Seban*, *Podebrad*, *Wultaw*, *Caurzin*, *Leimtometriz*, *Saltz*, *Pilsen*, *Prachen*, *Bechin*, *Czasslaw*, *Chradim*, *Hradetz*, *Glatz*, *Elnbogen*, and *Egra*. — The first is in the Middle, the four next following, are adhering round it; the nine which follow make a Circle round these; and of the three last, one is towards the Point, which looks to the East, and the two others towards that which looks to the West.

PRAGUE, on the *Wultaw*, is the Capital of the Kingdom; it is a great City, and honoured with an Archbishoprick, and an University; rendered famous by the Battle given near it, between the Forces of the Emperor, and those of the Elector Palatine of the *Rhine*, who had caused himself to be elected King of *Bohemia*, which Battle was a decisive one, since it put an End to his Royalty, and divested him besides of his Electorate: And as famous by the late Siege, sustained by the *French*; who had to encounter at once with a great Army, the Famine, and if we credit publick Reports, the Disaffection of the Inhabitants.

M O R A V I A.

This is the ancient Country of the *Marcomans*, which bore the Title of a Kingdom, afterwards of a Dutchy, and lastly of a Marquitate, of which the Kings of *Bohemia* bear the Title. It has borrowed its present Name from one of its Rivers.

MORAVIA has the Form of a Triangle, and may have 49 Leagues in its greatest Extent from East to West, and 30 from South to North.

The Climate and Soil is the same as in *Bohemia*, except

except that it produces pretty good Wine towards the River *Teya*, which parts it from *Austria*. The Mountains which part it from *Hungary*, have Springs of hot Mineral Waters.

Its principal Rivers are the *Morave*, from which it borrows its Name, and which runs through it from North to South; the *Swarte*, the *Igle*, and the *Teya*.

BRINN, on the *Swarte*, is the Capital of the Province, where the general Assemblies are held, ever since it opposed so strongly the *Swedes*; the Emperor having deprived *Olmutz* on the *Morave*, of that Honour, because it surrender'd then with little or no Resistance.

A more particular Division of the Kingdom of *Bohemia* is as follows.

The Prefecture of PRAGUE, containing Prague only.

The Prefecture of CHALY, containing Chaly, Rakomick.

The Prefecture of PODEBRAD, containing Bereum, Carlstein.

The Prefecture of WULTAW, containing Sedlezany, Tloskout.

The Prefecture of KAUIZIM, containing Kauzzim, Brandeifs, Bohemishbroda.

The Prefecture of LEITANERITZ, containing Leitaneeritz, Ufig, Dietzin, Melnick.

The Prefecture of SALTZ, containing Saltz, Bruck, Launy, Kadan, Commora.

The Prefecture of PILSEN, containing Pilsen, Meifs, Tayefs, Klataw, Kokisan.

The Prefecture of PRACHEN, containing Prachatitz, Piseck, Suschitz.

The Prefecture of BECHIN, containing Bechin, Tabor, Pelzrimau, Tein, Budweifs.

The Prefecture of CZASLAW, containing Czaflaw, Cuttemberg, Deutschbroda.

The Prefecture of CHRUDIN, containing Chrudin, Pardubitz, Bamberg, Hohemauth, Polieska, Leutomissel.

The Prefecture of HADRETZ, containing Konigingeratz, Jaromitz, Bidscoff, Konigshoff, Freiland.

The Prefecture of BOLESLAW, containing Jungbunizel, Nimberg, Dauba, Hitzenberg.

Frontier PREFECTURES.

The Prefecture of GLATZ, containing Glatz, Haberfweid.

The Prefecture of ELUBOGEN, containing Elubogen, Carlesbaden, Joachimstal.

The Prefecture of EGRA, containing Egra, Nebenitz.

The Marquisate of MORAVIA, contains Breux, Olmutz, Newftal, Ingervitz, Scanberg, Cremfir, Bernstein, Hiadifb, Pifnou, Brod, Poforitz, Golding, Austerlitz, Nemeritz, Aufpitz, Iglaw, Telfch, Polna, Slurwonicz, Mezericz, Frating, Trebicz, Nametz, Znaim, Nicklafburg, Ostra, Britsch, Jamnitz, Fulneck, Kaunitz.

S I L E S I A.

This Country made once Part of *Poland*, to which it is contiguous; it is of the Dependencies of *Bohemia*, whose Kings stile themselves Dukes of *Silesia*.

It has more than 80 Leagues in its greatest Extent, from South by East; and about 25 in Breadth to North by West.

Its Climate is not so bad as in the rest of *Bohemia*, but the Soil is very near the same, the Forests and Fields are full of wild, and domestick Beasts, and the Rivers abound with excellent Fish.

The most remarkable of its Rivers, are the *Oder*, which springs from it, and runs quite through it from South to North by West; the *Vistule*, which also springs from it; the *Neifs*; the *Westritz*; the *Zatzbach*; the *Bartsch*; the *Bober*; and several others which all disem-bogue into the *Oder*.

This Province contains 17 Dutchies, which are met with in following the Course of the *Oder*, in the Order mark'd hereafter; and four free Baronies, which are contiguous to *Poland*. Some of the Lords are Sovereigns, others depend on the Crown of *Bohemia*.

BRESLAW, on the *Oder*, is the Capital; which is honour'd with an Episcopal See, and govern'd by a Senate of Patricians, eleven of whom are noble, or of an ho-

nourable Family, and four chosen among Brewers, Merchers, Clothiers, and Butchers.

Note, That at the Death of the late Emperor, the King of *Prussia* enter'd this Province at the Head of an Army, in Virtue of some old Pretences he had upon it, and beating the *Austrians* in several Encounters, rendered himself Master of several considerable Places, particularly of *Breslaw*; and by a separate Treaty he made afterwards with the Queen of *Hungary*, without the Knowledge of his Allies (as pretended) has obtained from her the Cession of the greatest Part of that Province.

A more particular Description of the Dutchy of SILESIA, is as follows:

The Dutchy of TESCHEN, contains Teschen, Jablunka, Bileitz, Freistat, Friedeck.

The Barony of PLEISS, contains Pleifs, Berown, Miflowitz, Mikolow.

The Dutchy of RATIBOR, contains Ratibor, Oderberg, Rubenick, Sora.

The Dutchy of TROPAW, contains Tropaw, Beneschow, Engelsberg, Witkow.

The Dutchy of JEGGERNDORF, contains Jeggerndorf, Bendschin, Zanditz, Lubs, Mitze, Fulstein.

The Dutchy of OPPELEN, contains Oppelen, Briunitka, Beuthen, Klein-glogaw.

The Dutchy of NEISS, contains Neifs, Grotkaw, Jawernick, Zuckmantel, Warte.

The Dutchy of MUNSTERBERG, contains Munsterberg, Kamentz, Silberberg, Frankstein.

The Dutchy of BRIEG, contains Brieg, Olmaw, Crutzburf, Ritschen.

The Dutchy of SCHWEIDNITZ, contains Schweidnitz, Freyberg, Landshutt, Rbeichenbach, Furstenstein.

The Dutchy of BRESLAW, contains Breslaw, Bishop. Cantz, Newmark, Reichstal, Kosteplotz.

The Dutchy of OLSSE, contains Olffe, Bernstad, Festenberg, Trebnetz.

The Barony of WARTEMBERG, contains Wartemberg, Bralin, Goschatz.

The Dutchy of JAWER, contains Jawer, Schonaw, Schmitberg, Greiffenberg, Buntzlau.

The Dutchy of LIGNITZ, contains Lignitz, Parchwitz, Luben, Gradisberg, Wolstat.

The Barony of MILITSCH, contains Militfch, Freyheim.

The Barony of TRACHEMBERG, contains Trachemberg only.

The Dutchy of WOLAW, contains Wolaw, Leubust, Wintzig, Hernstad.

The Dutchy of GLACAW, contains Glacaw, Grumberg, Sprottaw, Wartemberg, Bolkowitz.

The Dutchy of SAGAN, contains Sagan, Naumberg, Prybus, Freystad.

The Dutchy of CROSSEN, contains Crossen, Roberfberg, Summersfeld, Drehmow, Guben.

HIGH SAXONY.

All the Countries included at present, under the Name of *High Saxony*, have near 70 Leagues from East to West, including *Lusatia*, and about 45 from South to North.

They confine Eastward with *Silesia*, Southward with the Kingdom of *Bohemia* and *Franconia*, Westward with *Hesse*, and the Dutchy of *Brunswick*, and Northward with the Dioceses of *Magdebourg*, *Halberstat*, and the Territories of *Brandebourg*.

The Climate is very good, though a little Cold: The Soil is fertile enough in Wheat and Pasture, but it seldom produces Wine; and very little Wood, particularly in the northern Part. Mines of Silver and Lead are found towards the East.

The *Elbe* runs through it, and receives the *Mulde*, and the *Sale*, swelled with the Waters of the *Elster*, and *Unstrut*, which spring from it, except the first. There are also found in it the *Sprae*, and the *Neifs*, which run through *Lusatia* from South to North.

High Saxony, is distinguished from the particular Dutchy of *Saxe Wittenberg*, and the Marquisate of *Misnie*, which

which are in the Middle, one Northward, and the other Southward; the Landgraviate of *Turinge*, Westward; and the Marquisate of *Lusatia*, Eastward.

WITTEMBERG, on the *Elbe*, is the Capital of the Dutchy of *Saxony*, and is a great and famous City.

DRESDEN, on the same River, is the Capital of *Misnei*: The Electors of *Saxony* keep their Court there. The Castle is strong and very magnificent, full of Rarities, and a great Number of precious Things, especially antique Medals.

ERFORD, on the *Gere*, is the Capital of *Turinge*; it is a very famous City, whose Jurisdiction belongs to the Archbishop of *Mayence*.

BAUTZEN, on the *Spree*, is the Capital of *Lusatia*.

The Dutchy of *SAXONY*, has given six Emperors to *Germany*; as may be seen in my *Chronology*. The Race of its Dukes, is one of the most antient of *Europe*, and has produced several great Princes and Heroes; but none greater than the late King of *Poland*, and Elector of *Saxony*, *Augustus II.* that excellent Prince, the Idol of his natural Subjects, and the Admiration of the whole Earth, was an Assemblage of all Royal Perfections, whose Radiancy had eclipsed that of *Augustus*, and of *Titus*, had he liv'd in their Time. For he was brave of his Person, liberal, magnificent, affable, a consummate Politician, and an experienc'd General; though sometimes unfortunate.

The Princes Electors of *Saxony*, are not absolute Masters of the whole Country, but several Sovereigns possess each a Part thereof.

Note, That the Saxons have always been very good Soldiers, and great Drunkards. They all followed the Doctrine of *Luther*, till the late Elector, and King of *Poland*, *Augustus II.* abjured *Lutheranism*, and embraced the Catholick Religion, in which his Son the present Elector, and also King of *Poland*, was educated.

Here follows a more particular Description of *high Saxony*.

The Dutchy of *SAXONY*, contains *Wittemberg*, *Dessau*, *Zerbst*, *Bernburg*, *Acker*, *Belzig*, *Torgaw*, *Ealemburg*, *Schweinitz*, *Hezberg*, *Elsterward*.

The Marquisate of *MISNIE*, contains *Dresden*, *Misnie*, Bishop. *Leipzig*, *Perin*, *Lutzen*, *Merspurg*, Bishop. *Naumburg*, Bishop. *Zeitz*, *Altemberg*, D. *Hall*, *Zuitkaw*, *Cheumnitz*, *Plawen*, B. *Sneberg*, P.

The Landgraviate of *TURINGE*, contains *Erfort*, *Scheidengen*, *Tenstat*, *Mulhausen*, Imp. *Northausen*, Imp. *Schwarsemburg*, *Weimar*, D. *Gotha*, D. *Alsat*, *Jene*, *Eisenach*, D. *Mansfeld*, County. *Stolberg*, County. *Eisleben*.

The Marquisate of *LUSATIA*, contains *Bautzen*, *Gorlitz*, *Camens*, *Liebaw*, *Zittaw*, *Guben*, *Corbutz*, *Spræmberg*, *Forst*, *Soraw*, *Fridland*.

BRANDEBOURG.

This Country which is placed in the Circle of higher *Saxony*, has received its Name from the City of *Brandebourg*, which was once the Capital; and depends of the Marquis of the same Name, who is Elector of the Empire, and King of *Prussia*, ever since the Peace of *Utrecht*.

It may have 75 Leagues in Length from East to West, 30 in its greatest Width from North to South, and 10 in its lesser.

It confines Eastward with *Poland*; Southward with *Silesia*, and *high Saxony*; Westward with *low Saxony*; and Northward with the Dutchy of *Mecklenbourg*, and *Pomerania*.

Its Climate is extremely cold, and the Winter very long, notwithstanding which the Soil produces all that's necessary for Life, even some Wine near *Francfort* on the *Oder*. It has large Forests, several Lakes, and Marshes, fine Pasture along the Rivers, with a great Number of Cattle.

Its most remarkable Rivers are the *Elbe*, and *Havel*, both join'd by a Canal; the *Spree*, which passes at *Berlin*, and disembogues into the *Havel*, at *Spandaw*; the *Harte*, which disembogues into the *Oder*, at *Kuferein*, &c.

This Province is divided into three Marches, distinguished by the Names of old, middle, and new. The first is Westward of the *Elbe*; between that River and the *Oder*, is found the second, with the Lordships of *Preg-natz*, *Rappin*, and *Uker-Mark*, towards the North; Eastward of the *Oder*, is found the last, with the Lordship of *Sterneberg*.

BERLIN, on the *Spree*, is at present Capital of the Province, and the Place of Residence of the Elector of *Brandebourg* and King of *Prussia*.

Note, That the Elector of *Brandebourg*, has at present the largest Territories of all the Sovereigns of *Germany*, except the King of *Bohemia*; which are divided here and there; for besides his Marquisate, we mention, he is possessed in *Westphalia* of the Principality of *Meinden*, of the Dutchy of *Cleves*, of the Counties of *La Mark*, of *Rewensperg*, and of the Lordship of *Ravenstein* in the *Brabant*. He holds in *low Saxony*, the Principalities of *Magdebourg*, and of *Alberstad*: The ulterior *Pomerania*, and the Ducal *Prussia*; also was declar'd legitimate Heir of *Neuchatell*, and *Velangin*, to the Exclusion of the other Pretenders, who had a better Right to it than he, and lastly almost all *Silesia*.

Note also, That his Subjects are almost all *Lutherans*, or *Calvinists*.

Here follows a more particular Description of *Brandebourg*.

The Middle MARCHE, contains *Berlin*, *Brandebourg*, Bishop. *Cohn*, *Spandaw*, *Oranienberg*, *Ratmaw*, *Trebin*, *Francfort*, *Nacke*, *Lebus*, *Milo*, *Bellitz*.

The Lordship of *PREGNITZ*, contains *Hawelberg*, Bishop. *Newstat*, *Wistoch*, *Dalmin*.

The Lordship of *RAPPIN*, contains *Wester-baus*, *Lindow*, *Uker-Murk*, *Premslow*, *Templin*, *Himmelpat*, *Lochenitz*, *Wulfsbagen*.

The Old MARCHE, contains *Stendel*, *Tangermund*, *Gardlesben*, *Osterburg*, *Sechausen*, *Werben*, *Soltwedel*, *Kalbesleck*.

The New MARCHE, contains *Kustrin*, *Landsperg*, *Berwald*, *Tietre*, *Soldin*, *Diesm*, *Arenswald*, *Retz*, *Dam*, *Kalis*, *Iramberg*, *Schifelbein*.

The Lordship of *STERNEBERG*, contains *Sterneberg*, *Sonnenberg*, *Meziritz*, *Reys*, *Zige*.

POMERANIA.

The Dutchy of *POMERANIA*, which made once Part of the Country of the antient *Vandals*, is also of the Circle of *high Saxony*. Some Geographers have called it *ulterior Pomerania*, to distinguish it from *Prussia*, which is the *citerior Pomerania*.

It is situated on the *Baltick Sea*, of which it occupies near 80 Leagues of Coast, from East to West; and its greatest Extent from South to North, does not exceed 20 Leagues.

It confines Northward with the *Baltick*; Eastward with *Prussia*; Southward with lower *Poland*, and the Marquisate of *Brandebourg*; and Westward with the Dutchy of *Mecklenbourg*.

Its Climate, which is extremely cold, does not hinder the Soil from being fertile in Corn, Fruit, and Pasture.

It has several small Lakes, the most considerable whereof are, the *Oder*, which divides it into two Parts; the *Pene*, the *Rega*, the *Persante*, the *Wipper*, the *Stolpe*, and the *Lebe*, which may be called Rivers; since they all run to the *Baltick*, except the *Pene*, which disembogues in the *Oder*.

It is divided into two Parts, that which is quite Eastward of the *Oder*, is called *higher Pomerania*; and the other Westward of it, is called the *lower*. This is subdivided into four other Parts, which are found in the following Order, going from East to West on the *Baltick Sea*, viz. the antient Dutchie of *Pomerania*, *Cassubia*, *Wandalia*, and *Pomerellia*, which contains the Counties of *Lawembourg*, and of *Butow*.

STETTIN, on the *Oder*, is the Capital of the whole Province, and the first of the *Hanse Towns* of the College of *Lubeck*.

The *higher Pomerania* is in the Power of the King of *Sweden* ever since the Peace of *Munster* in 1648. It has suffer'd a great deal from Time to Time, by the Ir-ruption of the *Germans, Danes, Dutch*, the Elector of *Brandebourg*, &c.

The *lower Pomerania*, is possessed by the Elector of *Brandebourg*.

Note, That they are all *Lutherans* in *Pomerania*: The Bishops are all married; and the Bishoprick of *Cammin* was secularised for that Subject by the Peace of *Munster*.

A more particular Description of *Pomerania*, is as follows:

High POMERANIA, contains *Stetin*, Dutchy. *Gartz, Ukermund, Anklam, Treptow, Gutzkow*, County. *Rentzin, Loitz, Demmin, Laffan, Wolgast, D. Gripfswald*, Hanse-Town. *Ludwisberg, Bardt, D. Stralsund, Imp. Damgarten, Fransborg, Tribbesas*.

The ISLE of *RUGEN*, contains *Berghen, Butbus, Wick, Sagard*.

The ISLES of *WOLLIN* and *USEDON*.

Low POMERANIA.

The antient *DUTCHY*, contains *Cammin*, Bishop. *New Treptow, Quarkemborg, Golnaw, Hans. Stargard, Hans. Salzig, Barnstein*.

CASSUBIA, contains *Colberg, Cossin, Belgart, Bublitz, Regenwolde*.

WANDALIA, contains *Stolp, Rugenwald, Slage, Rumelborg, Plotzke*.

POMERELLIA, contains *Lewemborg*, Lordship. *Lebe, Smollin, Buttow, Lordsh. Luppow*.

LOW SAXONY.

This was the Country of the antient *Saxons*, who settled in *England* after they had conquered the Kingdom, and expelled the antient *Britons* from it, who had called them to their Succour.

This Country is situated Southward of *Denmark*, and may have 80 Leagues in its greatest Extent from East to West; and 70 from South to North, the Dutchy of *Holstein* included.

It confines Northward with the *Germannick Ocean, Denmark*, and the *Baltick*; having Eastward *Pomerania*, and the low *Brandebourg*; Southward the *Hesse*, and *high Saxony*; Westward, it is separated from *Westphalia* by the *Wefer*.

Though the Climate be extremely cold, the Soil produces Wheat, but no Wine: Its greatest Fertility is in Pastures; and there are found in it several Forests.

It is divided into eight or nine Principalities: First, the Dutchies of *Saxony, Lunebourg*, and *Lawenbourg*, are in the Middle; the Dutchy of *Brunswick*, with the Dioceses of *Hildesheim, Magdebourg*, and *Halberstat*, are Southward; Northward, the Dutchies of *Bremen* and *Verden*; and the Dutchy of *Holstein*, which is the most Northward, depends at present of *Denmark*.

Besides these Principalities, there are found in *low Saxony* several Sovereignities of a lesser Extent; as the Counties of *Hanover*, of *Gotingen*, of *Grubenhagen*, the Cities of *Hambourg*, of *Lubeck*, &c.

Its most considerable Rivers are the *Elbe, Weser, Aller*, and *Hamma*, which comes to disembogue in it; the *Ilmenon, Leine, Oder, Elde*, &c.

Each of these Principalities is govern'd by its Prince, who bears the Name of it; except the Dutchies of *Bremen* and *Verden*, which belong to the King of *England*, as Elector of *Hanover*: The Principalities of *Magdebourg* and *Halberstadt*, which depend of the Elector of *Brandebourg*; and the Cities of *Hambourg* and *Lubeck*, which are Free.

Note, That they all follow throughout *low Saxony* the Doctrine of *Luther*; Princes, Prelates, even the Abbots of *Quedelimborg*, make Profession of it: The sole Bishop of *Hildesheim*, the Prince of *Mecklembourg* *Swerin*, the Abbots and Abbeesses, and some Prevosts are yet Catholics.

LUNEBOURG, on the *Immenow*; *LAWEMBORG*, on the *Elbe*; *BRUNSWICK*, on the *Oker*; *HIDELSHHEIM*, on

its River; *MAGDEBOURG*, on the *Elbe*; *HALBERSTAT*; *BREMEN*, on the *Elbe*; *VERDEN*, on the *Aller*; *ROSTOCK*, in *Mecklembourg*, are the Capital of this Country.

Here follows a more particular Description of *low Saxony*:

The Dutchy of *LUNEBOURG*, contains *Lunebourg, Harburg, Zell*, Dutchy. *Gisorn, Ultzen, Bardewick, Walfrode, Retheim, Borchdorff*.

The Dutchy of *LAWEMBORG*, contains *Lawembourg, Ratremburg, Nachburg, Weningen, Horn, Dalemburg*.

The Dutchy of *HOLSTEIN*, contains *Hambourg, I. and Hans. LUBECK, I. and Hans. Gluckstad, Kiell, Phoen, Rendspurg, Segelberg, Oldelhoe, Krempe*.

The Dutchy of *BRUNSWICK*, contains *Brunswick, Wolfenbutel, Goslar, I. Hans. Halemstad, Wolfburg, Ganderfheim, Hannover, D. Spigelberg, Hamelen, Hans. Callemberg, Newstadt, Burgdorff, Grubenhagen, D. Eimbeck, Hans. Lauterberg, Osterode, Altena, Gottingen, Dutch. Munden, Duderstad*.

The Bishoprick of *HIDELSHHEIM*, contains *Hidelsheim, Peina, Bruggen, Erichburg*.

The Dutchy of *MAGDEBOURG*, contains *Magdebourg, Borch, Jerikow, Wolmerstet, Muckeren, Draksted*.

The Principality of *HALBERSTAT*, contains *Halberstat, Quedelimborg, Abbey*.

The Dutchy of *BREMEN*, contains *Bremen, Staden, Hans. Bostchude, Hans. Carlstadt, Bremesfurt, Friburg, Statel, Blomendal, Aterendop, Hadler*.

The Dutchy of *VERDEN*, contains *Verden, Rodemburg, Rainsola, Langeviet, Newkirk*.

The Dutchy of *MECKLEMBOURG*, contains *Rostock, Lordsh. Ribnitz, Warnemund, Tessin, Sulte, Mecklembourg, Wismar, Hans. Ratzeburg, Kropelin, Renen, Severin, Lordsh. Wittemberg, Hagenaw, Bruel, Gustrow, Lordsh. Plawen, Lordsh. Waren, Parchim, Niederstat, Malchow, Lubitz, Strelitz, New-Brandenburg, Stutgard, Lordsh. Arensberg, Rebel*.

WESTPHALIA.

This Province was once Part of the Country of the antient *Saxons*, has receiv'd its Name from *Phalen*, which in old *Saxon* signifies a Colt, because antiently borne in their Coats of Arms, and of *West*, because it was Westward. — It has 64 Leagues in its greatest Extent from South to North, and 42 from East to West, without reckoning the Dutchies of *Cleves*, and *Juliers*, which are in its Circle.

It confines Northward with the Ocean; Eastward with *low Saxony*; Southward with *Hesse*; Westward with the Territories of the Succession of *Cleves* and *Juliers*, &c. which are of its Circle.

The Climate is very cold; the Soil very marshy, abounding in Pastures, and producing notwithstanding Corn enough; its Fruits are good for nothing else than to feed Hogs, who are seen there in great Numbers. The Inhabitants carry on a great Commerce of Bacon, especially Hams, which are carried to be sold at *Mayence*, and which are as much valu'd for their Goodness, as known by the Name of *Westphalia Hams*, and in *France, Jambons de Mayence*.

Its principal Rivers are the *Wefer, Elms*, and *Lippe*, which spring from the Bishoprick of *Paderborn*; the first runs through that of *Munster* from South to North; the other parts it from the County of *la Marck*, by its Course from East to West; the *Ruer*, which runs thro' the Counties of *Arnsberg*, and *la Marck*.

It contains seventeen Parts, or principal Sovereignities: First there are found, following the Course, and in the Neighbourhood of the *Ems*, the Bishoprick of *Munster*, the Counties of *Bentheim*, and *Lingen*, with the Principality of *East-Friseland*; between the *Ems* and the *Wefer*, the Bishoprick of *Osnabrug*, with the Counties of *Lemgow, Ravensperg, Techelemborg*, and *Diepholt*. In the Neighbourhood of the *Wefer*, re-ascending towards its Source, are found the Counties of *Oldenburg* and *Hoye*; the Principality of *Minden*, and County of *Schaumberg*; Southward of the *Lippe*, the County of *la Marck*, the Bishoprick of *Paderborn*, the Dutchy of *Westphalia*, and that of *Bergue*, which I have placed in the Dependencies

cies of the Succession of *Cleves* and *Juliers*.

It cannot be said that there is a Capital in *Westphalia*; but it may be said that the City of *Munster* is the most considerable of the Province, it being the Seat of a very powerful Bishop.

Westphalia is possessed by several Sovereigns, Ecclesiastick as well as Secular, whose Territories I have named in the Division; the Bishop of *Munster* possesses the best Part of it, and can set on Foot; and maintain an Army of 15 or 20,000 Men; which shews that the Apostles Successors have more than two Swords, which are not always drawn in Defence of their divine Master.

The other Sovereigns are *Catholicks* and *Lutherans*; and their Subjects follow in that Point the Example of their Sovereigns; for it must be observ'd, that the *Germans* are not very scrupulous in Matters of Religion.

Here follows a more particular Division of *Westphalia*:

WESTPHALIA, contains *Munster*, Bishop. *Rechem*, *Halteren*, *Casfeldt*, *Hans*. *Dulmen*, *Cloppenburg*, *Benthem*, County. *Northorn*, *Steinfart*, *Lingen*, County. *Embsen*, Princip. *Aurick*, *Norden*, *Oldendorp*, *Osnabrug*, Bishop. *Iborg*, *Hunteborg*, *Teklemburg*, Count. *Lingerick*, *Brochterberg*, *Ravensterg*, Count. *Herwoden*, Imp. *Bilewelt*, Imp. *Diephol*, Count. *Leworden*, *Bollagen*, *Wilhasen*, *Lemgow*, *Pirmond*, *Dietsmelle*, *Oldenburg*, Count. *Delmenshort*, *Frudenberg*, *Hoye*, Count. *Niewburg*, *Staltnaw*, *Minden*, Princip. *Petersbagen*, *Renteln*, *Baremburg*, *Schaumburg*, Count. *Rintelen*, *Saxenbagen*, *Paderborn*, Bishop. *Brackel*, Imp. *Warpurg*, Imp. *Corvey*, Abbey. *La Marcke*, County. *Ham*, *Hans*. *Unna*, *Hans*. *Durtmund*, I. *Hans*. *Zoest*, Imp. *Hans*. *Arensborg*, Count. *Lippe*, Count.

LOW-COUNTRIES.

These Provinces, call'd *Low-Countries*, because near the Sea, towards which the Rivers tend, have been call'd by some *inferior Germany*, though improperly, because they are but Part of it, no more than *Westphalia*, *low Saxony*, &c.

After they had had several particular Sovereigns, they came under the Domination of the Dukes of *Burgundy* in the Year 1426 to 1478; at which Time *Mary*, only Daughter of the Duke of that Name, kill'd before *Nancy*, was married to *Maximilian* Archduke of *Austria*, who was afterwards Emperor, and Grandfather of *Charles V.* to whom she brought for Dowry the *Low-Countries* and *Franch Comte*. Thus those Provinces being come to the Power of the Kings of *Spain*, they possessed them all till 1581; when the northern Part thereof revolted against *Philip II.* because his Governors treated the Inhabitants with too much Severity. The Prince of *Orange*, and some other malecontent Lords declared themselves Chief of the Rebellion; and since that Time both Parts have seldom been without War; one because of its Rebellion, and the other for the just Pretences the Kings of *France* had upon it.

They are situated toward the Extremity of the *Rhine*, extending from 49 Degrees 30 Min. of Latitude, to 53 Deg. 40 Min. and from the 23 Deg. 20 Min. of Longitude, as far as 28 Deg. 40 Min. so that they may have 66 Leagues from East to West, *i. e.* from *Keyel*, on the Confines of *Luxembourg* to *Beauzains* in *Artois*; and from South to North, from *Thionville* in *Luxembourg* to the Coast of *Groningen*.

They have *France* Southward; *Germany* Eastward; and the *Ocean* Northward, and Westward.

The Climate is cold; the Soil marshy, in several Places, and cross'd by a great Number of Rivers, Canals, and Forests, so that it does not produce much Corn; it has no Vineyards; it feeds a vast Number of large Cattle, which is the Cause why those Provinces abound with Butter, Cheese, and Leather.

The most remarkable Rivers of those Countries, are the *Rhine*, the *Meuse*, the *Escaut*; the *Iffel*, which has been join'd to the *Rhine* by a Canal below *Arnhem*; the *Moselle*, the *Lis*, the *Gumbre*, the *Scarpe*, &c.

They are distinguished into two Parts, one Southward, and the other Northward: The first is known by the Name of *Catholic Provinces*, or *Flanders*; and the other by that of the *United Provinces*, commonly call'd

Holland, of the Name of one of the Provinces, which is first in Rank.

The Catholic Low-Countries.

These Countries are called *Catholic*, because of the Religion they profess, and to distinguish them from the others who are *Calvinists*.

They were once Members of the Kingdom of *France*, and several Sovereigns who have possessed them since have done Homage for them to the Most Christian Kings. They came afterwards in the Power of the Dukes of *Burgundy*, and of the Kings of *Spain*, as already mention'd. *Charles V.* who was one of the greatest Politicians of his Time, conscious that the King of *France* had always a legitimate Pretence on those Provinces, obliged *Francis I.* while Prisoner at *Madrid*, after the Battle of *Pavia*, to renounce his Right. But as a King of *France* cannot by the fundamental Laws of his Kingdom, alienate the Territories thereof, his Successors have often attempted to recover by Force, what has been wrested from them by the Fines, and Chicanery of a violent Politick.

These Countries take up the Southern Part of all the *Low-Countries*, and extend from East to West, 66 Leagues; and from South to North, they advance as far as *Ravenstein*, on the *Meuse*, including in it that Part of *Brabant*, possessed by the *Dutch*: Therefore they may have about 47 Leagues from *Thionville* thither; otherwise they'll have 6 or 7 Leagues less.

Their Bounds are not different from the general, except that Northward, they confine with the United Provinces.

They are reckon'd nine in Number, *viz.* three Dutchies, which are *Brabant*, *Luxembourg*, and *Limbourg*; four Countries, that's to say, *Flanders*, *Artois*, *Hainault*, and *Namur*. The Marquisate of the holy Empire, including the City and Neighbourhood of *Antwerp*; the Lordship of *Malines*, which with the City, and its *Banlicies*, includes the Borough of *Heist*; the Bishoprick of *Liege*, and the Archbishoprick of *Cambray*, as Fiefs of the Empire, are added to those nine Sovereignties.

In the Middle of the Country, are found *Brabant*, *Hainault*, and *Cambresis*; in the Neighbourhood of the *Meuse*, the County of *Namur*, and the Country of *Liege*; Eastward the Dutchies of *Limbourg*, and of *Luxembourg*; Westward the Counties of *Flanders*, and *Artois*; the Marquisate of the holy Empire, and the Lordship of *Malines*, are inclosed in *Brabant*.

The particular *FLANDERS*, is divided into *Teutonic*, *Wallone*, *Imperial*, and *Dutch*. The first is inclosed between the Sea and the *Lis*; the second between the *Lis* and the *Escaut*; the third between the two others and *Brabant*; and the last is Northward of the two first.

BRABANT, is distinguished into *Spanish Brabant*, and *Dutch Brabant*; one Southward, and the other Northward.

BRUXELLES, on the *Senne*, which is a rich, large, and trading City, is the Capital of all the *Spanish Low-Countries*; and is ordinarily the Place of Residence of the Governor, and of the Council of State.

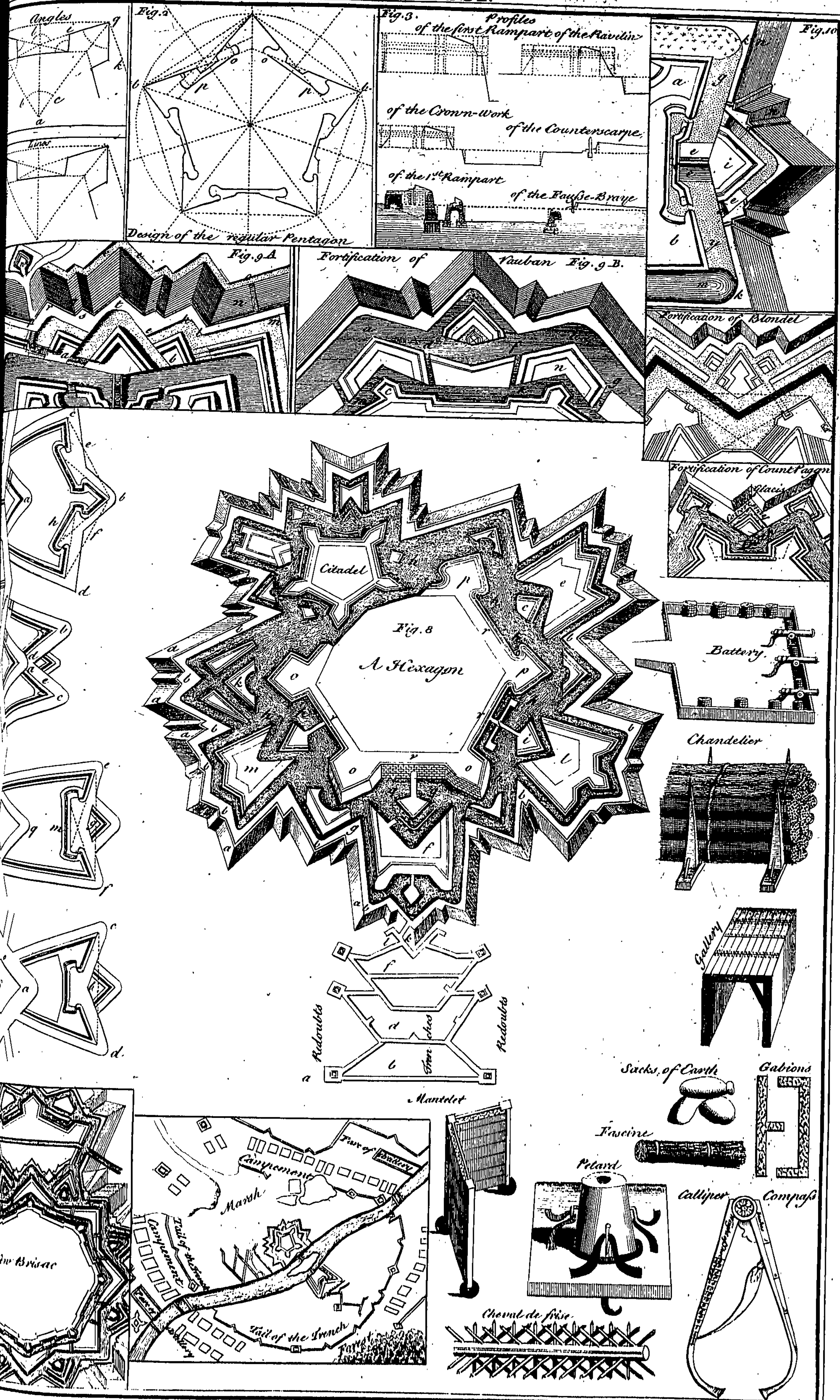
MALINES, on the *Dyle*, and *CAMBRAY*, on the *Escaut*, are Capitals of their Countries, have each their Archbishop, that of *Cambray* styling himself Prince of the Holy Empire.

ANTWERP, and *GHENT*, on the *Escaut*, are two very spacious Episcopal Cities. The first is the most trading one of all the *Spanish Low-Countries*, especially in Linen-Clothes.

TOURNAY, on the same River, is a Bishoprick, of which my Uncle *Louis Mercellus de Coetlogon*, was Bishop, when it was taken by the Duke of *Marlborough*; and I could wish the Nephew was as much in the Dutchess's Favour, as the Uncle was respected by the Duke. *Louis XIV.* honoured *Tournay* with a Parliament, in 1669.

IPRES, on the River of the same Name, *BRUGES*, on its Canal, are Episcopal Cities, situated in the *Teutonic Flanders*.

FORTIFICATION



ARRAS, on the *Scarpe*, and ST. OMER, on the *Aa*, in *Artois*, are very strong Cities, rendered famous by the great Sieges they have sustain'd; they have each their Bishop.

LIEGE and NAMUR, on the *Meuse*, are Episcopal Cities, Capital of their Country: The first has the most honourable Chapter of *Christendom*, which reckons Cardinals, several Princes, and Lords among its Prebends.

BOSLEDUC, a very strong City on the *Dannel*, in the *Dutch Brabant*; has also its Bishop.

LOUVAIN, on the *Dyle*, in the *Spanish Brabant*, is famous for its University.

Note, That the Inhabitants of these Provinces are not very ingenious, nor crafty; but they are brave, good Soldiers, and used to the Exercises and Fatigues of War. They are very sincere and affable, take Pleasure in Feasting their Friends, and have their Heart on their Lips; so that the Word of a *Fleming*, is better than the Bond of certain People.

These Countries are most of them, at least at present, under the Domination of the Queen of *Hungary*; but how long they'll continue so, some great Event in *Germany*, or a Treaty of Peace, is capable to determine; the King of *France* possesses also the *Artois*, and several Places in *Flanders*, *Hainault*, &c. The *Dutch* have that Part of *Brabant*, called *Dutch Brabant*, and that Part of *Flanders*, called also *Dutch Flanders*; besides the Barrier Towns.

Note also, That none but the Catholick Religion is permitted in the Dependencies of *France*, and of the Queen of *Hungary*; and that *Calvinism* reigns in the *Dutch Territories*.

A more particular Description of the *Catholick Low Countries*, is as follows:

The *Spanish BRABANT*, contains *Bruxelles*, *Louvain*, *Arfchot*, *Liere*, *Diest*, *Vikvoorden*, *Tillemont*, *Judoigne*, *Hirentals*, *Gemblours*, *Nivelle*.

The *Marquisate* of ANTWERP, contains *Antwerp*, only.

The Lordship of MALINES, contains *Malines*, Arch. *Heist*.

The *Dutch BRABANT*, contains *Bosleduc*, Bishop. *Breda*, *Bergopsum*, *Grave*, *Helmont*, *Eyndenboven*, *St. Uliet*, *Megem*, *Ravestein*.

The *HAINAUT*, contains *Mons*, *Valenciennes*, *Bouchain*, *Ath*, *Braine le-Comte*, *St. Guislain*, *Conde*, *Enguein*, *Barvay*, *Beinche*, *Halle*, *Maubeuge*, *Quesnoy*, *Avesnes*, *Landrecies*, *Philippeville*, *Mariembourg*.

The Archbishoprick of CAMBRAY, contains *Cambray*, Arch. *Chateau-Cambresis*.

The County of NAMUR, contains *Namur*, Bishop. *Bovines*, *Charleroy*, *Charlemont*. *Til-le-Chastreau*.

The County of LIEGE, contains *Liege*, Bishop. *Mastricht*, (at present in the Hands of the *Dutch*.) *Tongres*, *Huy*, *Dinant*, *Buikon*, *D. Fumay*, *Thuin*, *Rocheftort*, *S. Hubert*.

The *Dutchy* of LIMBOURG, contains *Limbourg*, *Dalem*, *Fauquemaut*, *Rolduc*, *Stephanswert*, *Roermund*, Bishop.

The *Dutchy* of LUXEMBOURG, contains *Luxembourg*, *Arlon*, *Bastogne*, *Marche en Famme*, *La Roche*, *Duderf-dorf*, *Thionville*, *Montmedy*.

The County of FLANDERS, contains *Ghent*, Bishop. *Bruges*, Bishop. *Ypres*, Bishop. *Berg S. Vinox*, *Ostend*, *Nieuport*, *Dendermond*, *Oloft*, *Ninove*, *Helvoetsliys*, *Dunkirk*, *Gravelines*, *Lille*, *Armentieres*, *Douay*, *Tournay*, *Oudenarde*, *Orchies*.

The County of ARTOIS, contains *Arras*, Bishop. *Bapaumes*, *Hesdin*, *Bethune*, *St. Venant*, *Aire*, *St. Omer*, Bishop.

UNITED PROVINCES.

This is that Part of the *Low-Countries*, whose Inhabitants shook off the *Spanish Yoke*, after they had been for a long Time tormented by the Cruelties of the Duke d'*Alva*, their Governor. That Tyrant rendered himself so odious to those People, naturally meek and tractable, that when they want, even to this Day, to express a

cruel Man, they say that he is a Duke d'*Alva*.

The Union they made at *Utrecht*, where they oblig'd themselves by a mutual Oath to succour each other, and to preserve their Liberty, made them be called *United Provinces*.

They have very near 50 Leagues Extent from North to South, from the Coasts of *Groninguen*, to *Ruremund* on the *Meuse*; and 35 from East to West, from the Territories of the Bishop of *Munster*, to the Ocean.

There is found in them a great Number of Rivers, Canals, and Marshes; but none of them considerable except the *Rhine*, the *Meuse*, and the *Iffel*. Between the Dutchies of *Guelderland*, and *Cleves*, the *Rhine* divides itself at the Fort *Schenck* into two Arms; the most meridional thereof, called the *Wahal*, throws itself into the *Meuse*, and both form the Isle of *Bommel*: The other, which retains the Name of *Rhine*, divides itself again into two Arms, near *Wick de Duerstede*; the most northern of the two retains its first Name, and goes to lose it with its Waters in the Sand beyond *Leiden*; the other called *Leck*, disembogues likewise into the *Meuse*, three Leagues below *Rotterdam*.

Those Provinces are eight in Number, reduced to seven Chiefs, because the County of *Zutphen* is included in the Dutchy of *Guelderland*. They keep the following Situation. First, Westward on the *Germanick Ocean*, are found the Counties of *Holland*, and *Zeland*; Northward on the same Ocean, the Lordships of *Friseland*, and *Groninguen*; Eastward the Lordship of *Overissel*, and the Dutchy of *Guelderland*; and between that Dutchy; and the County of *Holland*, the Lordship of *Utrecht*. In the Middle of these Provinces, is the *Zuerezzee*, which is a great Gulph, pretty large at Bottom; towards the Mouth thereof is the Isle *Texel*, which has a very fine Sea-Port, where the largest Ships come to unload their Merchandizes, which are transported afterwards in small Barks, throughout all *Holland*.

The Capital is AMSTERDAM, situated near the *Zuerezzee*, on the River *Hamstel*, whence it borrows its Name. It is reputed the most trading City in *Europe*; is beautiful, large, and accommodated with a very good Sea-Port.

DORDRECHT, has the first Rank in their Assemblies, and is the Place where the Money is coin'd.

ROTTERDAM, was the Country of *Erasmus*, whose rare Genius gain'd the Esteem of the greatest Princes of *Europe*.

LEYDEN, on the *Rhine*, has an University, which has lost for several Years past, very much of its Reputation and Lustre.

UTRECHT, on the *Rhine*, is the Place where the Deputies of the Provinces met for their Union; and also where that famous Treaty of Peace was concluded between *France*, and those who called themselves the high Allies; and against which the puny Stomachs of some of our Cooks in Politicks, nauseate much, tho' they have put it since to several different Sauces.

Note, That the Inhabitants of these Provinces, have a vast deal of Wit and Ingenuity, understand Commerce and Maritime Affairs very well: Their Capacity and Dexterity have render'd them formidable at Sea, and have made them make fine Conquests in the *East-Indies*, where they are the most powerful of all the *European Nations* who trade in those Climates. They possess several Places in the Isles of the *Sonde*, and in the *Molucca's*, and the Coasts of *Malabar* and *Coromandel*; and on other Coasts of *Asia*, *Africa*, and *America*. They are the only ones at present who are receiv'd in the Empire of *Japan*, for the Commerce of Gold and Silver, and the only ones who carry on the Commerce of Spices in the *Molucca's*. They are Masters of the Coasts of the Isle of *Ceylon*, and of several other Isles in the Eastern Ocean.

Note also, That the Government of these Provinces is democratical; and they may be consider'd as so many Republicks, which notwithstanding compose but one, called *The States General of the United Provinces*. The Assembly of these States meet at the *Hague*, in the

County of *Holland*, which nevertheless has but the Title of a Village, tho' it be larger, and better built than some famous Cities.

The Protestant Religion is the most followed in *Holland*, but all other Sects are tolerated; so that it is almost impossible to reckon the different Sects established at *Amsterdam* only.

Here follows a more particular Description of the *United Provinces*:

The County of *HOLLAND*, contains *Amsterdam*, *Haerlem*, *Leyden*, *Hague*, *Deft*, *Goude*, *Dordrecht*, *Rotterdam*, *Gravesande*, *Warden*, *Gorlum*, *Huesden*, *Briel*, *Reyerlandt*, *Gocræe*, *Ile. Gertrudenberg*, *Schonhoven*, *Oudewater*, *Woerden*.

WEST-FRISELAND, contains *Alekmaer*, *Beverwick*, *Medemblick*, *Enchuyfen*, *Horn*, *Edem*.

The County of *ZELAND*, contains *Walcheren*, *Ile. Middleburg*, *Flessingue*, *Armuiden*, *Campfer*, *Viere*, *Ramekins*, *Werendick*, *Schowen*, *Ile. Zierieræe*, *Browersbaren*, *Rommene*, *Duyreland*, *Zuid-berenlad*, *Ile. Goes*, *Romerswaal*, *Tolen*, *Ile. Martendick*, *Over-Flackace*, *Ile. Somerdick*, *Stadt*, *New-Tonge*, the *Isles of Nort-Bereland*, *S. Martin*.

The Lordship of *FRISELAND*, contains *Lecwarden*, *Dorkum*, *Staveren*, *Harlingen*, *Franeiker*, *Bolswart*, *Workum*, *Iist*, *Sneek*.

The Lordship of *GRONINGEN*, contains *Groningen*, *Hans. Dam*, *Delfzeel*, *Winschoten*.

The Lordship of *OVER-ISSEL*, contains *Deventer*, *Hans. Campen*, *Hans. Zuoll*, *Hans. Coevorden*, *Oldenzeel*, *Wolbenhoven*, *Hasselt*, *Steenwick*, *Blockzyl*, *Ootmersum*.

The Dutchy of *GUELDERLAND*, contains *Gueldre*, *Bishop. Venlo*, *Bishop. Wachtendonck*, *Bishop. Arnheim*, *Nimeguen*, *Tiel*, *Bommel*, *Batonborg*, *Harderwick*, *Hans. Eiburg*, *Hattem*, *Wageningen*, *Fort of Skenck*.

The County of *ZUTPHEN*, contains *Zutphen*, *Hans. Doesburg*, *Lothem*, *Groll*, *Brewoordt*, *Dotekum*.

The Lordship of *UTRECHT*, contains *Utrecht*, *Arch. Amersfort*, *Rbenen*, *Montfort*, *Wickte-Duerstede*.

The SUCCESSION of CLEVES and JULIERS and the ELECTORAL ARCHBISHOPRICKS.

These Countries, as I have already observed, are situated in the Neighbourhood of the *Rhine*, are so embarrassed one in another, that it would be almost impossible to mark the Extent of each in particular; therefore I'll mark it in general for the one and the other.

They extend from South to North more than 50 Leagues, from the Balliwick of *Vandrevauge*, in *Lorrain*, as far as to the Canal of *Iffel*, near *Arnheim*; but their Extent, Eastward, cannot be precisely fixed, because the Archbishopricks have Territories in several neighbouring Provinces; though it is known that they confine Eastward with *Westphalia* and *Hesse*; Southward with the Palatinate of the *Rhine*, and *Lorrain*; Westward with the *Low-Countries*; and Northward with only the *United Provinces*.

Though the Climate be cold, the Soil produces a considerable Quantity of Corn, and even Wine, but not equally every where; in some Places it is marshy, and abounds in Pasture; there are found in it several Springs of hot Mineral Waters.

The principal Rivers which run thro' them, besides the *Rhine*, are the *Moselle*, the *Roer*, and the *Lippe*, which disembogue in the *Rhine*; the first at *Coblentz*, the second at *Duyssbourg*, and the third at *Wesel*; with several Canals for the Communication between them.

The Succession of *CLEVES* and *JULIERS*, has been an Apple of Discord, which has thrown *Germany* and the *Low-Countries* into Confusion for several Years, and at several Times; the greatest was at the Death of the Duke *John William*, who left no legitimate Children. The Pretenders to that Succession were *John Sigismund*, Elector Marquis of *Brandebourg*, his Nephew on his Mother's Side *Mary Eleonore*; *Philip* Duke of *Newbourg*, his Brother-in-Law, on the Side of his Wife *Anne*, younger Sister of *Mary*; *John II.* Duke of *Deux-Ponts*, also his Brother-in-Law, by his Wife *Magdelaine*, younger Sister of *Anne*; *Charles* Archduke of *Austria*, likewise his Brother-in-Law, by his Wife *Sibille*, youngest of all the

three Sisters; *Charles* of *Gonzague* and *Cleves*, Duke of *Nevers*, founded on that he was Cousin on his Mother's Side. But of all these Pretenders, none but the Elector of *Brandebourg*, and the Duke of *Newbourg*, attempted to dispute it by Arms; the first with the Succours of the *United Provinces*, and the other with that of *Spain*: They agreed at last that the Dutchies of *Juliers* and *Bergue* should remain to the Duke of *Newbourg*; and the Elector of *Brandebourg* should have for his Part the Dutchy of *Cleves*, the County of *La Marcke*, that of *Ravensburg*, inclosed in *Westphalia*, and the Lordship of *Ravensstein* on the *Meuse*, inclosed in the *Dutch Brabant*, and which he has kept ever since: But the Duke of *Deux-Ponts* dying likewise without Issue, who was the last possessor of the Dutchies of *Bergue* and *Juliers*, this Part of the Succession has occasion'd a fresh Dispute between a great Number of powerful Pretenders, which has been decided at last in favour of the Prince of *Sultzbach*, supported by the King of *France* in his Pretensions.

The Archbishop of *MAYENCE*, besides the Extent of his Diocese, possesses several Places in *Franconia*, in *Hesse*, and in *Turinge*.

The Archbishop of *TREVES*, possesses nothing beyond the Extent of his Diocese.

The Archbishop of *COLOGNE*, is Master, or Protector of several Cities in *Westphalia*.

MAYENCE, on the *Rhine*, is the Capital of its Diocese, and a very large City.

TREVES, or *TRIERS*, on the *Moselle*, is a very large City of no Strength, and has an University of no Reputation.

COLOGNE, on the *Rhine*, is a beautiful City, famous for its University, and Types for Printing.

CLEVES, Capital of its Dutchy, is situated on a little River, pretty near *Fort Skenck*.—*JULIERS*, Capital of its Dutchy, is situated on the *Roer*.

Note, That the Catholic Religion is the most followed in these Countries.

A more particular Description of these Territories, is as follows:

SUCCESSION of CLEVES and JULIERS.

The Dutchy of *CLEVES*, contains *Cleves*, *Emmerich*, *Ruz*, *Wesel*, *Burich*, *Orsoy*, *Callar*, *Göch*, *Duyssbourg*, *Imp. Ringenberg*, *Santen*, *Dinslaken*, *Genep*.

The County of *LA MARCK*, contains *Dortmund*, *Imp. Luynen*, *Unna*, *Hans. Rucklinhusen*, *Essen*, *Abbey. Werden*, *Abb. Ooest*, *Hans. Rbinberg*, *Marq. Alpen*, *Meurs*, *County. Ravensburg*, *C. and Ravensstein*, *Lordsh.*

The Dutchy of *JULIERS*, contains *Juliers*, *Duren*, *Linnen*, *Aix la Chapelle*, *Aldenhoven*, *Zulpick*, *Heyaßberg*, *Kerpen*, *Grevembruck*, *Bredebent*, *Erkelms*, *Dalen*, *Bruggen*.

The Dutchy of *BERGUE*, contains *Dusseldorp*, *Folingen*, *Everweld*, *Mulheim*, *Blankenberg*, *Seigberg*, *Schellsburch*, *Wildenberg*, *Hardenberg*, *Winderfuid*, *Ratingen*, *Lennepe*.

ELECTORAL ARCHBISHOPRICKS.

The Archbishoprick of *MAYENCE*, contains *Mayence*, *Arch. Bringen*.

In *HESSE*, it has *Wissbaden*, *Königstein*, *Friedburg*, *Fritzlar*.

In *FRANCONIA*, it has *Chattemburg*, *Bischofstein*, *Lor. County*.

In *TURINGE*, it possesses *Erfurt*, *Heiligenstad*, *Dudestad*.

The Archbishoprick of *TREVES*, contains *Treves*, *Arch. Sarburg*, *Grimberg*, *Weldentz*, *Witlich*, *Kerpen*, *Manderscheid*, *County. Pruein*, *Abbey. Gerolstein*, *Coblentz*, *Kilberg*, *Ulm*, *Hunstein*, *Numagen*, *Freudenberg*.

The Archbishoprick of *COLOGNE*, includes *Cologne*, *Bonn*, *Keiffewerd*, *Nuiss*, *Zonsk*, *Bruill*, *Kempem*, *Bruggen*, *Ardernach*, *Woring*, *Nurenburg*.

In *WESTPHALIA*, *Arensberg*, *County. Hertzberg*, *Nuin*, *Balve*, *Friedberg*, *Altenvied*, *Boer*, *Bonover*, *Hornberg*, *Dorsten*.

LOW PALATINATE.

This Country is call'd the *Palatinate* of the *Rhine*, because situated in the Neighbourhood of that River; and *low Palatinate*, to distinguish it from the *high*, which is that of *Bavaria*, situated towards the *Danube*.

Frede-

Frederick V. Count *Palatine* of the *Rhine*, was one of the seven Electors of the Empire, and was crowned King of *Bohemia* by the *Hussites*, and *Protestants*, who had drawn him into their Revolt. Emperor *Ferdinand II.* looking upon that Action as an Attempt against his Rights, summon'd him to appear at the Diet of *Ratisbon*, and put him to the Ban of the Empire: But seeing that the Elector little minded his Menaces, he pursued him with a great Army; the Battle was fought near *Prague* in 1620. the *Palatine* lost it, his Army was routed, his *Palatinate* given to the Duke of *Bavaria*, with the best Part of his Country; and the rest divided among several particular Princes: But at the Instances of the Kings of *France*, and *Sweden*, the *low Palatinate* was restored to him by the Peace of *Munster*, and the Emperor created, in his Favour, an eighth Elector.

The greatest Extent of that Country is of about 25 Leagues, from East to West, and of 22 from South to North.

It confines Eastward with *Franconia*, and *Suabia*; Southward with *Alsace*; Westward with *Lorraine*, and the Archbishoprick of *Triers*; and Northward with that of *Mentz*.

The Climate is a little Cold; notwithstanding which, the Soil is very fertile in Corn, excellent Wine, and Pasture.

The *Rhine* receives there the *Neckar*, and the *Lauter*, one near *Manheim*, and the other near *Bingen*.

Besides the particular Territories of the Count *Palatine*, there are found in it those of the Bishops of *Spire* and *Worms*, of the Dukes of *Deux-Ponts* and *Simmeren*, of the *Palatine* of *Birkenfeld*, and of some other Princes less powerful.

The Capital of the *Palatine* is *Heidelberg* on the *Neckar*: It had once one of the fairest Libraries of *Europe*; but Count *Tilly*, General of the Emperor, sent it to the Pope, after he had taken the City in 1622. It has a famous University.

Each Prince is Sovereign in his Territories, and tho' the Count *Palatine* be the most powerful, none of the others depend of him.

Calvinism was once the reigning Religion in the *low Palatinate*; but ever since the *Dauphin*, Grandfather of the present King of *France*, burnt that Country, and thereby forced most of its Inhabitants to fly into *England*, and other Protestant Countries, that Party has been much weakened: There is a great Number of *Jews* in *Worms*, where they have a Synagogue.

A L S A C E.

This was the Country of the ancient *Tribotes*, which is call'd *Elzas* by the *Germans*, and was erected into a Landgraviate by the Emperor *Otho III.*

Alsace, properly speaking, is entirely Westward of the *Rhine*, tho' commonly is understood by the Name *Alsace*, a Tract of Land taken in *Suabia*, which extends as much Eastward as Westward of the *Rhine*; so that all the whole Country known under the Name *Alsace*, may extend 34 Leagues from South to North, and 18 or 20 from East to West.

It confines Northward with the *Palatinate* of the *Rhine*; Eastward with *Suabia*; Southward with *Switzerland*; and Westward with *Lorraine*, and the County of *Montbelliard*.

This Country is extremely fertile in Corn and Wine, Saffron, and Pastures which feed a great Number of Cattle: It has Mines of Silver, Lead, and Copper; and Quarries of beautiful Marble.

Besides the *Rhine*, which runs thro' it from South to North, there is no other considerable River but the *Ill*.

Particular *Alsace* is divided into *high* and *low*: The *high Alsace* contains also the *Sundgow*, with the Counties of *Ferrette*, and *Altkirk*; the *low* includes the Prevosty of *Weissenburg*.

The Country, Eastward of the *Rhine*, is divided into three Parts: The most Southward is the *Brisgow*; that of the Middle is the *Mortnaw*; and the most Northward is the Marquisate of *Baden*.

The most considerable City, and which may be call'd the most considerable of the whole Country, is *Strasbourg*

on the *Ill*, distant from the *Rhine* of a Cannon-Shot: It is an Imperial City, whose Bishop is Prince of the Empire.

ENSISHEIM, on the *Ill*, is the Capital of the Landgraviate; *Surverne*, *Haguenau*, *Schelestat*, are Cities which the *French* have fortified.

Here follows a more particular Description of all those Countries.

The *LOW PALATINATE*, contains *Heydelberg*, *Frankendal*, *Manheim*, *Oppenheim*, *Landaw*, Imp. *Spire*, Imp. *Philishourg*, *Wormes*, Imp. Bishop. *Darmstat*, Landg. *Deux Ponts*, Dutch. *Keyserstutther*, *Lauterech*, D. *Ulm*, *Simmeren*, Dutch. *Birkenfeld*, D. *Erpach*, D.

The *BRISGOW*, contains *Brisach*, *Fribourg*, *Newemburg*. *MORTNAW*, contains *Offenberg*, *Gengenbach*, *Oberkirk*, *Baden*, Marq. *Stolhofen*, *Durlach*, Marq. *Pforstein*.

HIGH ALSACE, contains *Ensisheim*, Landg. *Colmar*, *Keiserperg*, *Munster*, Greg. *Murbach*, *Rufek*.

SEMDGOW, contains *Ferrette*, C. *Altkirk*, *Beffort*, *Tann*, *Mulhausen*, Imp.

LOW ALSACE, contains *Strasbourg*, Bishop, *Molsheim*, *Rosheim*, *Oberhenheim*, *Schelestat*, *Saverne*, *Haguenau*, *Werdt*, *Seltz*, *Benheim*, *Andlaw*, *Inguiller*, *Weissenburg*, *Luterburg*.

SWITZERS CANTONS, their ALLIES, and SUBJECTS.

The whole Country known under the Name of *SWITZERLAND*, including their Allies, and Subjects, has 66 Leagues in its greatest Extent from East to West, from the County of *Bormio*, to *Mont St. Claude*; and 47 from South to North, from the Balliwick of *Mendisi*, to the Frontiers of *Suabia*.

It confines Northward with *Alsace*, and *Suabia*; Eastward with *Tyrol*; Southward with *Lombardy*, and the Lake of *Geneva*; and Westward with *Franche Comté*.

Note, That this Country, whose Inhabitants *Cæsar* calls *Helvetians*, has received its Name from the Canton of *Schwitz*, one of the three first who took up Arms to shake off the Yoke of the House of *Austria*, which was insupportable to them. The Emperor *Albert* seeing the Revolt of those People who were his Subjects, enter'd their Country Sword in Hand, to bring them back to their Duty; but he was killed in the Attempt. His Children to revenge the Death of their Father, carried into *Switzerland* an Army of 20000 Men, who were defeated by an 100 Men of that Canton of *Schwitz*; so that the *Germans* hearing nothing every where but that Word *Schwitz*, called by that Name, not only those first Rebels, but likewise all those of the other Cantons, who imitated them in their Revolt, so that it has been left to them ever since.

The Climate of *Switzerland* is wholesome, and very subtle; the Soil very unequal, and full of Mountains, particularly Southward; but it is so carefully cultivated, that it produces every Thing necessary, except Wine, which is found but in some Places, where there are Vineyards. Though most of the Mountains be covered with Snow, there are found upon some of them very good Pasture, and fine Fountains; in the Valleys are several Lakes; the most remarkable being those of *Geneva*, of *Constance*, of *Eell*, of *Newchatel*, of *Beill*, of *Morat*, of *Thum*, of *Brientz*, of *Lucerne*, of *Zurich*, of *Zug*, of *Locarne*, and of *Riva*.

Several great Rivers spring from it, as the *Rhine* which forms itself at the Bottom of *Mont St. Gothard*, in the *Grey Ligue*, springing from three Sources, two of which, after they have run separately for the Space of 12 or 13 *French* Leagues, join together 3 Leagues below *Caire*; then after they have parted the *Rheintal* from the County of *Tyrol*, and passed through the Lake of *Constance*, through *Schaffhausen*, through the four Forest Towns of *Suabia*, and through *Basil*, enters at last into *Alsace*. The *Aar* which springs from it, and carries its Waters into the Canton, and City of *Berne*, to disembogue afterwards into the *Rhine*. The *Rhône*, the *Ruk*, and the *Tessin*, which springs from the same Mountain, in the Canton of *Aoy*; the first crosses the *Vallais*, and passes through the Lake and City of *Geneva*.

neva. The second passes through the Lake and City of *Lucerne*, and disembogues in the *Aar*. The last takes its Course towards the Dutchy of *Milan*, and passes into the Lake of *Locarne*.

SWITZERLAND, is divided into 13 Cantons, which are so many Republicks. In these 13 Cantons are included several Territories and Republicks, their Allies; and several Countries subject to them, either by Convention, or Right of Arms.

BASIL, on the *Rhine*, near *Alsace*, is the Capital of its Canton, and the most considerable of *Switzerland*; it has the Title of Bishoprick, but the Bishop makes his Residence at *Porentru*.

SOLEURE, on the *Aar*, is also Capital of its Canton, and one of the most famous Cities of *Switzerland*; it is there the Ambassadors from *France* commonly make their Residence.

GENEVA, situated at the Extremity of its Lake on the *Rhône*, is a very strong City, govern'd in Form of a Republick, and allied of *Switzerland*. It was once a Bishop's See; but *Calvinism* having been established there with an absolute Power, the Priests and Prelates have been expelled from it, and the Exercise of the *Catholic* Religion entirely abolished. The Bishop makes his Residence at *Annecy* in *Savoy*.

SCHAFFOUSE, on the *Rhine*; LUCERNE, on the *Rust*; BERN, on the *Aar*; ZURICH, on its Lake; are fair and large Cities, but which have nothing considerable, or particular, but that of being Capital of their Cantons.

Note, That the *Switzers* are generally of a strong Constitution, have a great deal of Sense, Dexterity of Hand, and Industry, but not much Politeness. They love War, but not in their own Country, and do not care for whom, or against whom they fight, provided they are paid for it; for without Money they will not stir. Their Infantry is very good, especially to sustain a Shock.

Their Government is entirely democratical, and they have no other particular Chiefs, but Captains and Magistrates chosen among the People, by the Deputies of each Canton.

They follow the *Catholic* Religion, and the *Calvinism*, with Liberty, though formerly they have gone to War against one another, for the Interest of Religion. There are seven *Catholic* Cantons, which I'll mark in the following particular Description of those Countries, with a C. four *Protestants*, which will be mark'd with a P. and two mix'd with *Catholics* and *Protestants*, which I'll distinguish by C P.

A more particular Description of SWITZERLAND, is as follows.

The Canton of ZURICH, P. contains *Zurich*, *Kyburg*, County. *Grueningen*, *Andelfingen*, *Griffensee*, *Klingemar*, *Eglisow*, *Regenspurg*, *Rutty*, *Wadischoill*, *Lauffen*.

The Canton of BERN, P. contains *Bern*, *Them*, *Arberg*, *Brintz*, *Sana*, *Lauzanne*, *Aubonne*, *Nion*, *La Serre*, *Erlach*, *Aaraw*, *Bruck*, *Lentsberg*, County. *Vangen*.

The Canton of LUCERNE, C. contains *Lucerne*, *Sempach*, *Willisow*, *Sursec*, *Wicklen*, *Volhusen*.

The Canton of URI, C. contains *Uri*, *Altorf*, *Attinghusen*, *Ariola*, *Gefanen*, *Jornico*.

The Canton of SCHWITZ, C. contains *Schwitz*, *Kufnach*, *Einselden*, *Wag*, *Grinow*.

The Canton of UNDERWALDEN, C. contains, *Stantz*, *Engelberg*, *Sarnen*, *Lungeren*, *Bekenried*, *Stanstat*, *Krientz*.

The Canton of ZUG, C. contains *Zug*, *Cham*, *Bar*, *Egen*, *Risch*, *Oberwyl*.

The Canton of GLARIS, C P. contains *Glaris*, *Wesen*, *Urnen*, *Quart*, *Elm*, *Nestel*.

The Canton of BASIL, P. contains *Basil*, *Augst*, *Leichsall*, *Munchstein*, *Walmburg*, *Hamburg*, *Wildenstein*, *Bottingen*, *Dornach*, *Grolingen*, *Dermenach*, *Dugst*.

The Canton of FRIBOURG, C. contains *Fribourg*, *Romont*, County. *Favernach*, *Corbars*, *Montenach*, *Griers*, County. *Peterlingen*, *Rue*, *Platley*, *Joun*, *Berssch*.

The Canton of SOLEURE, C. contains *Soleur*, Coun-

ty. *Olten*, *Balstein*, *Thirstein*, County. *Flumenthal*, *Leingen*.

The Canton of SCHAFFOUSE, P. contains *Schaffouze*, *Newkilch*, *Herkingen*.

The Canton of APPENZEL, C P. contains *Appenzel*, *Wrnoschen*, *Gonten*.

ALLIES OF SWITZERLAND.

The GREY LIQUE, contains *Ilantz*, *Tront*, *Disentiff*, *Flintz*, *Splugen*.

The CAS-DEE, contains *Casaccia*, *Vespran*, *Tenffencafel*, *Tinesont*, *Chiavennue*, County. *Riva*.

The TEN COMMONALITIES, contain *Davos*, *Alfenow*, *S. Pieter*, *Majensfeld*.

The VALTELINE, contains *Tirano*, *Sondrio*, *Teglio*, *Morbegno*, *Bormio*, County.

The REPUBLICK, and ABBEY OF ST. GALL, contain *St. Gall*, *Leichstenteg*.

The Bishoprick of CONSTANCE, contains *Constance*, *Bishop*. *Merspurg*, *Meinaw*.

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In ALSACE, *Malbausen*.

In SUABIA, *Rotweil*.

The Prevosty and County of NEUCHASTEL, contain *Neuchatel*, *Vallangin*, *Biel*, Republick. *Geneva*, Republick.

The VALLAIS, contains *Sion*, *Bishop*. *Martinach*, *S. Moritz*, *Leuch*, *Natters*, *Visp*.

The Bishoprick of COIRE, contains *Coire*, *Bishop*. *Haldenstein*.

SUBJECTS OF SWITZERLAND.

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The FREE PROVINCES, contain *Mejemberg*, *Richenzae*, *Ergow*, *Raperswill*.

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RHEINTAL, contains *Rheineck*, *Alstretten*.

The GOVERNMENT OF ITALY, contains *Logan*, *Locarne*, *Mendrisi*, *Val-Madia*, *Bellenzone*.

Since I am so near HUNGARIA, and that Kingdom is also of the Dependencies of the House of *Austria*, at least in Part, and the Theatre of a Scene, at present, which attracts the Eyes of all *Europe*, it would be injudiciously done by me, to run throughout the rest of *Europe*, and come back afterwards to this Kingdom, since by that Time the Idea of the Government and Neighbourhood of the Territories of that august House might be lost.

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The Climate of the Country is very unwholesome, its Waters bad and stinking, except those of the *Danube*; which notwithstanding, the Soil is very fertile in Corn,

Corn, Wine, Fruits, and Pastures. It abounds extraordinarily in horned Cattle, in wild Beasts and Game, and very good Horses are brought from thence. Mines of Gold, Silver, Copper, and Salt, are found in its Mountains.

Its principal Rivers, after the *Danube*, are the *Drave*; the *Save*; the *Teik* or *Tibisc*; the *Marisch*; the *Raab*, which forms an Isle of the same Name; the *Vag*; the *Gran*; and the *Sarwibze*, which flows from the Lake *Balaton*; besides this Lake, there are found those of *Newfidler*, of *Beizberk*, and some others less considerable.

Hungary has been divided in several Manners; but I find not a more natural Division of it, than by making one Part of it *Royal*, or *Christian*, and the other *Turkish*, or *Mahometan*.

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The Queen of *Hungary* possesses the *Christian Hungary*, that is to say, the most northern Part of that Kingdom, which extends towards the South as far as *Mosche* on the *Danube*, beyond the Isle of *Schut*, and as far as the City of *Banbalan*, between *Austria* and *Transylvania*; and the most Western Part, which extends Eastward as far as the same Isle *Schut*, and the Lake *Balaton*, between the *Danube* and the *Save*.

She possesses besides the most Western Part of *Esclavonia*, of *Croatia*, and of *Morlania*; one is, as already observed, included between the Rivers *Drave* and *Save*. The other between the last River and the Gulph of *Venice*; and extends from the Frontiers of *Carniole* about 20 Leagues Eastward.

The *Turks* possess the most Eastern Part of it, which is almost three Times as big as the other; but I'll defer speaking of it, as well as of the *Turkish Hungary*, till I come to describe *Turkey* in *Europe*.

Note, The *Catholic* Religion is yet preserv'd in *Hungary*, among some noble antient Families, but most of the others are *Calvinists*, and the common People are *Lutherans*; there are also found among them *Arians*, *Trinitarians*, some *Anabaptists*, and a great Number of *Jews*.

Here follows a more particular Description of the *Christian Hungary*.

HIGH HUNGARY, contains *Presburg*, *Durn*, *Schintia*, *Holitz*, *Frestat*, *Lednick*, *Transchin*, *Arna*, *Inder Arna*, *Lautsch*, *Eperies*, *Scharos*, *Ungwar*, *Zemblin*, *Perigia*, *Ugogh*, *Namin*, *Somos*, *Zatmar*, *Delreczen*, *Naghkalo*, *Echud*, *Banbalan*, *S. George*, *Cheghe*, *Friedt*.

BERG-STRE, contains *Konigsbog*, *Schemnis*, *Templis*, *Crens*, *Bistritz*, *Alstoll*, *Newshol*, *Kremnis*.

Part of the Government of *NEUSHOUSEL*, contains *Filleck*, *Selschin*, *Holock*, *Burack*, *Palanka*, *Tugel*, *Leiva*, *Bars*.

The Government of *CASSOVY*, contains *Cassovy*, *Tornaw*, *Budnock*, *Borsania*, *Dyos*, *Onoth*, *Takay*, famous for its Wines.

LOW HUNGARY, contains *Komore*, *Altemburg*, *Newsidl*, *Edunburg*, *Schlaping*, *Gunez*, *Sabaria*, *Schazavar*.

The Government of *JAVARIN*, contains *Javarin*, *Geftes*, *S. Martin*, *Zonanza*, *Meriges*, *Rappa*, *Eschneck*, *Wesprim*, *Wasan*.

Part of the Government of *CANISE*, contains *Kirment*, *Mairoft*, *Egerszeg*, *Georgewar*, *Zalczwar*, *F. of Serin*.

The *CHRISTIAN ESCLAVONIA*, contains *Agram*,

Kopranitza, *S. George*, *S. Pierre*, *Zum-Creutz*, *Warafdin*, *Kraping*, *Grabonitza*, *Welika*, *Kolantz*, *Zagrab*.

The *CHRISTIAN CROATIA*, contains *Sigeg*, *Mokish*, *Petrina*, *Curlstad*, *Kerstina*.

MORLAKIA, contains *Zegna*, *Modrusch*, *Otozas*, *Fiume*, *Jablonitza*, *Sixa*, *Ouglin*.

Note, That the late Emperors have almost found Means to join *Transylvania* to their Dominions, a Province, which when govern'd by its own natural Sovereigns, has been sometimes tributary to the *Turks*, and sometimes under the Protection of the Emperors of *Germany*.

TRANSILVANIA, has almost the Figure of a Lozange, and may have about 68 Leagues in its greatest Extent from East and West, and 62 from South to North.

It confines Westward with *Hungary*; Northward with *Poland*; Eastward with *Moldavia*, and *Valachia*; and Southward with this last Province and *Hungary*.

The Climate is extremely temperate, and the Soil very fertile in Corn, delicious Wines, Fruit, and Pulse; but the Water is very unwholesome. Its Mountains, which are in great Number, have Mines of Gold, Silver, Lead, and Quick-Silver; full of wild Beasts, and Game of all Sorts, so that it is a very good Country.

Its most considerable Rivers are, the *Marish*, and the *Chryse*, which spring from it.

Note, That there are three Sorts of People found in this Province, who differ a little in Laws and Maxims, viz. the *Ciculi*, who are the most antient; the *Hungarians* and the *Saxons*, who possess more than three Quarters of the Country. All these People were formerly govern'd by one Chief, called *Vaivode*, or Prince of *Transylvania*.

The Capital is *HERMANSTAT*, or *ZEBEN*, the *Vaivode's* Seat. That of *Wasferbeli*, is the Place where the *Siculi* hold their Assemblies.

Note, That the *Transylvanians* are much divided in Matter of Religion; the *Siculi*, and *Hungarians*, are most of them *Calvinists* or *Arians*; the *Saxons* are almost all *Lutherans*. There are also found among them, *Catholics*, *Greeks*, *Arians*, and *Anabaptists*, &c.

A more particular Description of *Transylvania*, is as follows:

TRANSILVANIA, contains *Hermanstadt*, *Fogoras*, *Brassaw*, *Biestrix*, *Segestwar*, *Wasserbeli*, *Megies*, *Coloswar*, *Zekelheid*, *Albe-Julia*, *Zabesen*, *Hemiad*.

P O L A N D.

This Kingdom which made once Part of the antient *Sarmatia*, is at present one of the most spacious of *Europe*.

Its greatest Longitude is from the 38 Degree to the 58½; and its greatest Latitude from the 47½ to the 58½, without including the Dutchy of *Courland*, which extends as far as towards the 59; so that it may have 270 Leagues in its greatest Length from East to West, from the Frontiers of the *Little Tartary*, to those of *Brandebourg*; and near 200 from South to North, from the Mountains of *Transylvania*, to the Dutchy of *Courland*.

It confines Northward with the *Baltick Sea*, *Livonia*, and *Muscovy*; Eastward with the same Estate, and the *Little Tartary*; Southward with *Moldavia*, *Transylvania*, and *Hungary*, from which it is separated by the *Neister*, and the Mountains *Krapatz*; lastly, Westward with *Germany*.

The Climate of the Country is as different as its Soil is unequal; for in the Western Provinces, the Climate is cold, but pure. The Soil produces so great Abundance of Corn and Fruits, that they are transported into foreign Parts; particularly Northward, where are found *Champagne* Countries of a vast Extent; Southward the Soil is full of Mountains, enriched with Mines of Silver, Copper, Iron, Lead, Minerals, and Salt. In the Eastern Provinces, as in *Lithuania*, the Climate is also very cold, but unwholesome. The Country is full of Forests, Marshes, Lakes, and Rivers, whose Waters

neva. The second passes through the Lake and City of *Lucerne*, and disembogues in the *Aar*. The last takes its Course towards the Dutchy of *Milan*, and passes into the Lake of *Locarne*.

SWITZERLAND, is divided into 13 Cantons, which are so many Republicks. In these 13 Cantons are included several Territories and Republicks, their Allies; and several Countries subject to them, either by Convention, or Right of Arms.

BASIL, on the *Rhine*, near *Alsace*, is the Capital of its Canton, and the most considerable of *Switzerland*; it has the Title of Bishoprick, but the Bishop makes his Residence at *Porentru*.

SOLEURE, on the *Aar*, is also Capital of its Canton, and one of the most famous Cities of *Switzerland*; it is there the Ambassadors from *France* commonly make their Residence.

GENEVA, situated at the Extremity of its Lake on the *Rhône*, is a very strong City, govern'd in Form of a Republick, and allied of *Switzerland*. It was once a Bishop's See; but *Calvinism* having been established there with an absolute Power, the Priests and Prelates have been expelled from it, and the Exercise of the *Catholick* Religion entirely abolished. The Bishop makes his Residence at *Annecy* in *Savoy*.

SCHAFFOUSE, on the *Rhine*; LUCERNE, on the *Rufs*; BERN, on the *Aar*; ZURICH, on its *Lake*; are fair and large Cities, but which have nothing considerable, or particular, but that of being Capital of their Cantons.

Note, That the *Switzers* are generally of a strong Constitution, have a great deal of Sense, Dexterity of Hand, and Industry, but not much Politeness. They love War, but not in their own Country, and do not care for whom, or against whom they fight, provided they are paid for it; for without Money they will not stir. Their Infantry is very good, especially to sustain a Shock.

Their Government is entirely democratical, and they have no other particular Chiefs, but Captains and Magistrates chosen among the People, by the Deputies of each Canton.

They follow the *Catholick* Religion, and the *Calvinism*, with Liberty, though formerly they have gone to War against one another, for the Interest of Religion. There are seven *Catholick* Cantons, which I'll mark in the following particular Description of those Countries, with a C. four *Protestants*, which will be mark'd with a P. and two mix'd with *Catholicks* and *Protestants*, which I'll distinguish by C P.

A more particular Description of SWITZERLAND, is as follows.

The Canton of ZURICH, P. contains *Zurich*, *Kyburg*, County. *Grueningen*, *Andelfingen*, *Griffensee*, *Klingemar*, *Eglisow*, *Regenspur*, *Rutty*, *Wädelschwill*, *Lauffen*.

The Canton of BERN, P. contains *Bern*, *Them*, *Arberg*, *Brintz*, *Sana*, *Lauzanne*, *Aubonne*, *Nion*, *La Serre*, *Erlach*, *Aaraw*, *Bruck*, *Lentsberg*, County. *Vangen*.

The Canton of LUCERNE, C. contains *Lucerne*, *Sempach*, *Willisow*, *Sursee*, *Wicklen*, *Volhusen*.

The Canton of URI, C. contains *Uri*, *Altorf*, *Attinghusen*, *Ariola*, *Gesenen*, *Jornico*.

The Canton of SCHWITZ, C. contains *Schwitz*, *Kusnach*, *Einselden*, *Wag*, *Grinow*.

The Canton of UNDERWALDEN, C. contains, *Stantz*, *Engelberg*, *Sarnen*, *Lungeren*, *Bekuriel*, *Stansat*, *Krientz*.

The Canton of ZUG, C. contains *Zug*, *Cham*, *Bar*, *Egen*, *Risch*, *Oberwyl*.

The Canton of GLARIS, C P. contains *Glaris*, *Wesen*, *Urnen*, *Quart*, *Elm*, *Nessel*.

The Canton of BASIL, P. contains *Basil*, *Augst*, *Leichstall*, *Munchstein*, *Walmburg*, *Hamburg*, *Wildenstein*, *Bottingen*, *Dornach*, *Grolingen*, *Dermenach*, *Dugst*.

The Canton of FRIBOURG, C. contains *Fribourg*, *Romont*, County. *Favernach*, *Corbars*, *Montenach*, *Griers*, County. *Peterlingen*, *Ruë*, *Platze*, *Joun*, *Berssch*.

The Canton of SOLEURE, C. contains *Soleur*, Coun-

ty. *Olten*, *Balstein*, *Thirstein*, County. *Flumenthal*, *Leingen*.

The Canton of SCHAFFOUSE, P. contains *Schaffouse*, *Newkilch*, *Herkingen*.

The Canton of APPENZEL, C P. contains *Appenzel*, *Wrnoschen*, *Gonten*.

ALLIES OF SWITZERLAND.

The GREY LIGUE, contains *Ilantz*, *Tront*, *Disentiff*, *Flintz*, *Splugen*.

The CAS-DEE, contains *Casaccia*, *Vespran*, *Teuffencastel*, *Tinesont*, *Chiavenue*, County. *Riva*.

The TEN COMMONALITIES, contain *Davos*, *Alfenow*, *S. Pieter*, *Majensfeld*.

The VALTELINE, contains *Tirano*, *Sondrio*, *Teglio*, *Morbegno*, *Bormio*, County.

The REPUBLICK, and ABBEY OF ST. GALL, contain *St. Gall*, *Leichstenteg*.

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The VALLAIS, contains *Sion*, Bishop. *Martinach*, *S. Moritz*, *Leuch*, *Natters*, *Visp*.

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RHEINTAL, contains *Rheineck*, *Alstretten*.

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Here follows a more particular Description of the *Christian Hungary*.

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BERG-STET, contains *Konigsbog*, *Schemnis*, *Templis*, *Creus*, *Bistritz*, *Altstoll*, *Newshol*, *Kremnis*.

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The Government of *CASSOVY*, contains *Cassovy*, *Tornaw*, *Budnock*, *Borsania*, *Dyos*, *Ooth*, *Takay*, famous for its Wines.

LOW HUNGARY, contains *Komore*, *Altemburg*, *Newsidl*, *Edunburg*, *Schtaping*, *Guncz*, *Sabaria*, *Schazavar*.

The Government of *JAVARIN*, contains *Javarin*, *Gestes*, *S. Martin*, *Zonanza*, *Meriges*, *Pappa*, *Eschneck*, *Wesprim*, *Wasan*.

Part of the Government of *CANISE*, contains *Kirment*, *Mairost*, *Egerszeg*, *Georgewar*, *Zalewar*, *F. of Serin*.

The *CHRISTIAN ESCLAVONIA*, contains *Agram*,

Kopranitza, *S. George*, *S. Pierre*, *Zum-Creutz*, *Warasdin*, *Kraping*, *Grabonitza*, *Welika*, *Kolantz*, *Zagrab*.

The *CHRISTIAN CROATIA*, contains *Sigeg*, *Mokish*, *Petrina*, *Curlstad*, *Kersina*.

MORLAKIA, contains *Zegna*, *Modrusch*, *Otozas*, *Fiume*, *Jablonitza*, *Sixa*, *Ouglin*.

Note, That the late Emperors have almost found Means to join *Transylvania* to their Dominions, a Province, which when govern'd by its own natural Sovereigns, has been sometimes tributary to the *Turks*, and sometimes under the Protection of the Emperors of *Germany*.

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Its most considerable Rivers are, the *Marish*, and the *Chryse*, which spring from it.

Note, That there are three Sorts of People found in this Province, who differ a little in Laws and Maxims, viz. the *Ciculi*, who are the most antient; the *Hungarians* and the *Saxons*, who possess more than three Quarters of the Country. All these People were formerly govern'd by one Chief, called *Vaivode*, or Prince of *Transylvania*.

The Capital is *HERMANSTAT*, or *ZEBEN*, the *Vaivode's* Seat. That of *Wasserbeli*, is the Place where the *Siculi* hold their Assemblies.

Note, That the *Transylvanians* are much divided in Matter of Religion; the *Siculi*, and *Hungarians*, are most of them *Calvinists* or *Arians*; the *Saxons* are almost all *Lutherans*. There are also found among them, *Catholics*, *Greeks*, *Arians*, and *Anabaptists*, &c.

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P O L A N D.

This Kingdom which made once Part of the antient *Sarmatia*, is at present one of the most spacious of *Europe*.

Its greatest Longitude is from the 38 Degree to the 58 $\frac{1}{2}$; and its greatest Latitude from the 47 $\frac{1}{2}$ to the 58 $\frac{1}{2}$, without including the Dutchy of *Courland*, which extends as far as towards the 59; so that it may have 270 Leagues in its greatest Length from East to West, from the Frontiers of the *Little Tartary*, to those of *Brandebourg*; and near 200 from South to North, from the Mountains of *Transylvania*, to the Dutchy of *Courland*.

It confines Northward with the *Baltick* Sea, *Livonia*, and *Muscovy*; Eastward with the same Estate, and the *Little Tartary*; Southward with *Moldavia*, *Transylvania*, and *Hungary*, from which it is separated by the *Neister*, and the Mountains *Krapatz*; lastly, Westward with *Germany*.

The Climate of the Country is as different as its Soil is unequal; for in the Western Provinces, the Climate is cold, but pure. The Soil produces so great Abundance of Corn and Fruits, that they are transported into foreign Parts; particularly Northward, where are found Champagne Countries of a vast Extent; Southward the Soil is full of Mountains, enriched with Mines of Silver, Copper, Iron, Lead, Minerals, and Salt. In the Eastern Provinces, as in *Lithuania*, the Climate is also very cold, but unwholesome. The Country is full of Forests, Marshes, Lakes, and Rivers, whose Waters

are not wholesome to drink; the Wheat cannot be brought in it to Maturity. Lastly, it is so disagreeable, that those who will travel are forced to wait for the Winter, which lasts two Thirds of the Year, and during which there is Ice strong enough to bear Carts loaded.

The principal Rivers of this Kingdom, are, the *Vistula*, which passes at *Cracow*, *Sandomir*, *Warsaw*, *Uladislaw*, *Thorn*, *Culm*, and *Dantzick*, which is the most considerable City of *Royal Prussia*; very famous for its Commerce, and one of the four Capitals of the Hanse-Towns of *Germany*: The *Warte*, which after having passed at *Siradia*, and *Posna*, goes to disembogue into the *Oder*: The *Bog*, which passes at *Bressici*, and disembogues into the *Vistula*: The *Duna*, which passes at *Vitefpuz*, and *Polotez*, and disembogues into the Gulph of *Riga*: The *Niemen*, or *Borysbenes*, which after it has passed at *Smolensko*, runs through one End of *Lithuania*; then having received the Waters of the *Pripee*, in *Volbinia*, passes at *Kiow*, and having traversed all *Ukrania*, disembogues into the *Pont-Euxine*: Lastly, the *Niefter* and the *Bog*, one whereof passes at *Kaminieck*, and continue both their Courses, from West to East, as far as the *Black Sea*.

This Kingdom is divided into eleven principal Parts, which are again subdivided into *Palatinates*. Westward are the *high* and *low Poland*, with *Prussia*: Northward, the Dutchy of *Lithuania*, with that of *Courland*, which was once under the Protection of *Poland*, and at present under that of *Russia*: Eastward the Dutchy of *Lithuania*, and *Volbinia*: Southward, *Podolia*, and *Black Russia*: Lastly, in the Middle, *Moravia*, *Polakia*, and *Polesia*.

Note, That the *Polanders* have advantageously preserv'd the Right of Electing their King. They are brave Soldiers, particularly their Cavalry, is one of the best of the whole World, being mostly composed of the Nobility of the Kingdom: They love Magnificence and good Cheer: They are entire in their Sentiments; and seek with Passion after Revenge, and Independency: The Nobility treats the Peasants like Slaves, particularly in *Lithuania*, and have commonly a Troop of Braves in their Retinue, whom they employ to maltreat those poor People.

Note also, That it may be said, that the Government of *Poland* is *Monarchical*, because they have a King; *Aristocratical*, because the King cannot determine any State Affairs, without the Consent of the Senators; and *Democratical*, because of the Power the Noblemen have in the Diets which the King causes to be convoked.

Note, again, that tho' the *Polanders*, in general, be very zealous *Catholics*, there are found among them *Lutherans*, *Calvinists*, *Socinians*, *Jews*, and several other Sects, even *Idolaters*, in *Samogatia*.

PRUSSIA.

PRUSSIA, situated on the *Baltick*, is divided into *Royal* and *Ducal*; the first is South by West of the other, and are in Part embarrassed, towards the Middle, the one in the other. The *Royal Prussia* is in the Power of the King of *Poland*; *Dantzick*, I have already mentioned, being the most considerable among its Cities; and the *Ducal Prussia*, is of the Dependencies of the Elector of *Brandebourg*. Its Capital is *Konigsberg*, or *Royal-mont*, on the River *Pregel*, which disembogues in the *Hab*, which is a Lake joined to the Sea, 15 Leagues long, and 2 Leagues broad. A little higher is found another Lake of the same Name, with the Surname of *Guron*; it is as long as the first, and twice as large.

The Dutchy of *Courland*, is Southward of the Gulph of *Riga*, and of the *Duna*, which parts it from *Lithuania*. It has its particular Duke, who, when in *Courland*, resides at *Mittaw*, Capital of his Dominions, on the River *Bulderaw*.

A more particular Description of the Kingdom of *Poland*, is as follows:

High POLAND.

The Palatinate of *Cracow*, contains *Cracow*, Bishop. *Zator*, D. *Ozwieczon*, D. *Vounitz*, *Czentocho*, *Sandeck*, *Eyecz*.

The Palatinate of *SENDOMIR*, contains *Sandomir*, *Zawichost*, *Polaniecz*, *Sechow*, *Kzerszow*, *Vislicza*, *Malogoser*, *Radom*.

The Palatinate of *LUBLIN*, contains *Lublin*, *Kasimir*, *Vizendow*, *Parkow*, *Lakow*.

PRUSSIA.

Royal PRUSSIA.

The Palatinate of *MARIEMBURG*, contains *Marienburg*, *Dirschaw*, *Mewa*.

The Palatinate of *DANTZICK*, contains *Dantzick*, and *Pautz*.

The Palatinate of *ELBING*, contains *Elbing*, *Frawenberg*, *Braunsberg*, *Heisberg*.

The Palatinate of *CULM*, contains *Culm*, *Thorn*, *Gaudentz*, *Golaw*.

The Ducal *PRUSSIA*, contains *Konigsberg*, *Pilaw*, *Velaw*, *Johansberg*, *Marienveder*, *Tilsa*, *Memel*.

Low POLAND.

The Palatinate of *SIRADIA*, contains *Siradia*, *Viellun*, *Krzepice*, *Piotzkow*.

The Palatinate of *LANCICI*, contains *Lancici*, *Uniezow*, *Bresni*, *Inouclocz*.

The Palatinate of *KALISH*, contains *Kalish*, *Gnesna*, *Arch. Kamin*, *Lauda*, *Nackel*, *Pisizi*.

The Palatinate of *POSNA*, contains *Posna*, *Bishop*, *Srzoda*, *Prinen*, *Mezeritz*, *Zandak*, *Ragozno*.

The Palatinate of *RAVA*, contains *Rava*, *Lowicz*, *Gostinin*, *Sosanzow*.

The Palatinate of *WLADISLAW*, contains *Wladislaw*, *Bidgostid*, *Biechow*.

The Palatinate of *BRZESTYE*, contains *Brzestye*, *Krowick*, *Cowale*, *Wisnow*.

The Palatinate of *PLOCZKO*, contains *Ploczko*, *Plunsk*, *Radzanow*, *Rasunt*, *Siepez*.

The Palatinate of *DORBZIN*, contains *Dorbzin*, *Slonko*, *Rippina*.

Dutchy of LITHUANIA.

The Palatinate of *WILNA*, contains *Wilna*, *Wilkomiers*, *Offmiuna*, *Dusiaty*.

The Palatinate of *TROKI*, contains *Troki*, *Kowna*, *Grodno*, *Lida*, *Meruz*.

The Palatinate of *NOVOGROD*, contains *Novogrod*, *Wolkowiska*, *Lakowicz*, *Mir*, *Sloncin*.

The Palatinate of *MINSKI*, contains *Minski*, *Borissow*, *Zuisloez*.

The Dutchy of *ZLUCZ*, contains *Zlucz*, *Dorobi*, *Laban*, *Krodano*, *Petrilow*.

The Principality of *MSCISLAW*, contains *Mscislaw*, *Mobilow*, *Bickow*, *Orssa*, *Robaczow*, *Breczica*, *Mazy*, *Bobroisko*.

The Palatinate of *WITEPSK*, contains *Witepsk*, *Skras*, *Kzusnislaw*, *Woronocz*, *Sussa*, *Ulna*.

The Palatinate of *POLOCZK*, contains *Poloczsk*, *Usasza*, *Drusna*, *Drissa*, *Drina*, *Koscan*.

The Palatinate of *BRESLAW*, contains *Breslaw*, *Madzial*, *Narocz*.

WOLHINIA.

HIGH.

The Palatinate of *LUZUCK*, contains *Luzuck*, *Waldzimierz*, *Berefticko*, *Kzenieniec*, *Constantinow*, *Zassow*, D. *Ostrog*, D. *Alexandria*, *Baranowka*, *Zitomierz*, *Berdikzow*.

LOW.

The Palatinate of *KIOW*, containing *Kiow*, *Bialogrodko*, *Rodomisel*, *Czernobel*, *Lotowwogrod*, *Obalow*, *Pereflaw*, *Kaniow*, *Bialacerkiow*, *Kzirkass*, *Dassain*.

PODOLIA.

HIGH.

The Palatinate of *KAMINIECK*, containing *Kaminieck*, *Bishop*, *Zwanieck*, *Oucze*, *Tarnapole*, *Zbasas*, D. *Ustaitin*, *Bar*, *Cbeniebruick*, *Ladow*, *Kalus*.

LOW.

The Palatinate of *BRACKLAW*, containing *Bracklaw*, *Brailow*, *Winnicza*, *Kalnick*, *Humone*, *Targowice*, *Chryckiesni*, *Konieczpol*, *Oribow*, *Rakow*.

Black RUSSIA.

The Palatinate of *LWOW*, contains *Lwow*, *Arch. Busck*, *Olesko*, *Zborow*, D. *Halicz*, *Snyatin*, *Colomei*, *Zedaczow*.

Łaczow, Premiska, Przeworsk, Jarosław, Sanock, Łabaczow, Zamoski, Grobowice.

The Palatinate of **BELZ**, contains *Belz, Sokal, Mosty, Magierow, Tiskoweze, Oborkow, Herodlow.*

The Palatinate of **CHELM**, contains *Chelem, Winnice, Ratno, Lubanke, Turysk, Dubna, Krasnostaw.*

MAZOVIA.

The Palatinate of **CZERSK**, contains *Czersk, Warsaw, Łew, Leirno, Serotzeck, Zakerotzin, Wischerod, Ciechanow, Wisna, Lumsa, Nur, Slubow, Norodur, Kamienieck.*

The **SAMOGITIA**, contains *Rosienie, Medniki, Kieydani, Poniewiejs, Vielona, Villeja, Eragola, Pattagen, Kroze, Birza, D. Sarlatt, Schwonden, Swicła.*

COURLAND, contains *Mittaw, Doblin, Golding, Libe, Wnidaw, Grubin, Argermund, Ezwalen, Dalen, Selburg, Bauske, Radziviliski.*

The **POLAKIA**, contains the Palatinate of *Bielsk*; and,

The Palatinate of **BIELSK**, contains *Bielsk, Branjsk, Saras, Tikoczin, Kaissin, Wafilow, Augustow, Milnick, Droghiszin, Loficze, Grodeck.*

The **POLESIA**, contains the Palatinate of *Bressici*; and,

The Palatinate of **BRESSICI**, contains *Bressici, Kamienieck, Koden, Pinsk, Motol, Pohost, Zunia, Dawidow, Morodak, Tarow, Kobua, Dubrowica.*

MUSCOVY.

Note, That though I have placed this Empire but the Sixth in Order in my general Division of *Europe*, I will place it here, not to lose the Idea we have of its Confines with *Poland*; and this is, in my Opinion, more *à propos*, than if I was going to seek previously to it, the Isles of *Great-Britain*, which being separated from all the other Parts of it, are also to be placed apart.

MUSCOVY, or *White Russia*, is a Part of the antient *Sarmatia*; and the most Eastern, as well as most extended of all *Europe*: It has borrow'd its Name from its Capital City, rather than from the River *Moska*, which runs through it.

Its greatest Latitude is from the 50th Degree to the 70th; and its Longitude extends from the 51st to the 93d, which is the Extremity of *Europe*: But if we will include in it that Part of *Tartary* in *Asia*, which is in the Power of the Empress of *Russia*, it will extend as far as the 115 Degree, between the 49½, and the 72d of Longitude.

The Climate is extremely cold, particularly Northward, where the Snow and Ice are seen during three Quarters of the Year; notwithstanding which the Summer's Heats are sometimes excessive for six Weeks.

It confines Northward with the Icy Sea; Eastward with *Great Tartary*; Southward with the *Don* or *Tanais*, and *Little Tartary*; West with the Kingdoms of *Poland*, *Sweden* and *Norway*.

The Plains are marshy, and much crossed, Northward with Lakes, and vast Forests. The small Quantity of Corn sowed in them never comes to Maturity: The Soil is much less sterile towards *Poland*, where it produces a great Quantity of Flax and Corn, but no Wine. It abounds with Honey, even in the Forests; with wild Beasts and Game; the Lakes and Rivers with Fish; but its most rare Commodities are the fine and rich Furs, in which consists the greatest Riches of its Inhabitants.

This Country is ill peopled, because full of uninhabitable Marshes, of vast Forests and Deserts; Rivers of a prodigious long Course, as the *Volga*, which springs from it in the Country of *Twer*, and after it has crossed it from West to East, as far as the Kingdom of *Cazan*, turns towards the South; where after it has run through the Kingdoms of *Bulgar* and of *Asracan*, divides itself into several Arms, the most Western, which waters the capital City of this last Kingdom, forming several Isles before it disembogues into the *Caspian Sea*, where it has several Mouths. The *Don*, or *Tanais*, which flows from the great Lake *Ivanow Osero* in the Forest of *Epiphunow*, near *Rezan*, and continues its sinuous Course from East to West, then bends again

towards its Source, and runs always serpentine, to disembogue into the *Palus Maeotides*, or Sea of *Zeebacha*. The *Dwina* takes its Source pretty near the Lake *Biel Osero*, and after it has passed through the most trading Cities of *Muscovy*, it disembogues through several Mouths into the *White Sea*, or *Gulph St. Nicolas*. The *Oby* in *Asia*, which traverses the deserted *Tartary*, from South to North by West, and disembogues into the *Icy Sea*. The *Jenei*, which traverses the *Lapponia* in the same *Tartary*, and runs of a Course most parallel to the *Oby*. Besides these great Rivers, there are some others less, though the Course of the lesser of them all, has more than an hundred Leagues, as *Petzora*, which passes in the Monts *Riphean*, or *Stolp*, and disembogues into the *Icy Sea*. The *Waima*, which passes in the same Monts, and running from North to South, comes to mix its Waters with those of the *Dwina*, below *Oustiong*. *Kama*, which after it has received the *Wiatka*, in the Kingdom of *Cazan*, disembogues into the *Volga*, between *Cazan* and *Bulgar*. The *Little Don*, or *Donieck*, which glides between the two different Courses of the *Tanais*. The *Occa* which springs from the Frontiers of *Little Tartary*, very near the Source of the *Donieck*, and running from South to North disembogues into the *Volga* at *Nisi-Novogrod*. The *Onega*, which forms the Lake of *Kargapol*, gives its Name to a Province which it traverses, and disembogues into the *White Sea*.

Its most renowned Lakes are Westward. The *Ladoga* and *Onega*, which confines with *Finland*, are the most renowned of *Europe*. The first may have 55 Leagues in Length, 25 in Breadth, and 140 in Circuit. The other is 50 Leagues long, 18 broad, and 120 in Circuit. The Lake *Bielosero*, which gives its Name to a Province, may have 20 Leagues in Length, 10 in Breadth, and 50 of Circuit. The Lake *Imment*, near the great *Novogrod*, is less than the last by near a Quarter.

It would be very difficult to divide distinctly *Muscovy* in *Europe*, without the Assistance of its Rivers; therefore I have took Notice of a great Number of them.

The Province of *Moscow*, which is the Capital of the Empire, is between the *Occa* and the *Volga*. In the Neighbourhood, and following the Course of that great River, are found the Provinces of *Rschow, Twer, Rostow, Jaroslaw, Susdal, and Nisi-Novogrod*. Southward of the same River, the *Czeremissi-Nagornoi*, the *Mardouati*, and the People who inhabit the Frontiers of the *Little Tartary*; and who have most of their Cities in the Neighbourhood of the *Don*. Following the Course, and in the Neighbourhood of the *Occa*, the Provinces of *Worotin, Rezan, and of Wolodimir*. Joining *Lithuania*, those of *Sewiera, of Smolensko, and of Bielski*, in the Neighbourhood of the Source of the *Duna*. Between the first Course of the *Volga*, from South to North, and the Territories of *Sweden, Novogrodweliki, and Pleskow*. Northward of the same River, going from West to East, are found the Provinces of *Bickolero, Vologda, Oustiong, the Czeremissi-Lagowoi, Wiatka, and Permski*, which is still more advanced to the North. On the *Northern Ocean*, or Sea of *Muscovy*, are found, in going from East to West, the Provinces of *Petzora, Juhora, Condora, and Dwina, of Kargapol* on the *White Sea*, with the *Muscovite Lappony*.

The Capital City of the whole Empire is *Moscow*, in the Province of the same Name, and on the River *Moska*, from which the whole Country borrows its Name; and where the Emperors used to keep their Court, till *Peter the Great* transferr'd it to *Petersbourg*, the great *Novogrod, Susdal, and Rostow*, are Archiepiscopal Cities, and Capital of their Provinces.

The Countries which the *Muscovites* have appropriated to themselves, or rendered Tributaries in *Tartary*, may be consider'd in two principal Parts, one whereof is Southward, in the Neighbourhood of the *Volga*; and the other Northward in the Neighbourhood of the *Oby*. In the first, following the Course of the first of those two Rivers, are found, Westward, the Kingdoms of *Cazan, Burgard, and Asracan*, with the People call'd *Vachines*; Eastward the *Hordes of Zavolba, and Nogaye*, to whom some join the *Cossacks* and *Seibants*. In the other are found, at the Left of the *Oby*, the *Horde of Pega*, the Provinces

Provinces of *Siberia* and *Obdora* at the Right, the *Lucanoria*, *Loppia*, the *Samoyedi* and the *Tingensi*. All the Inhabitants of these Provinces have several different Names, but they are so little known, that I prefer passing them by under Silence, than to mention them impertinently, as several Authors have done.

Note, That the *Muscovites* were very unpolite and wild, and ignorant, before the Reign of *Peter the Great*. They love Wine to excess, are mistrustful, treacherous, cruel, and addicted to all Sorts of Vices, and Brutalities even the most criminal. Falshood and Deceit in Trade, passes among them for Wit and Dexterity.

Note also, That this vast Country is governed by a Prince, who till *Peter I.* used to take the Title of *Czar* or *Knes of Muscovy*. The Monarchy is hereditary, and if the Emperor die without Issue, his nearest Relation is placed on the Throne. His Government is despotic, because he has an entire Power of Life and Death over his Subjects, who take it for an Honour to stile themselves his Slaves. Even the greatest Lords subscribe their Letters and Requests with a diminutive Name, as *Jeannot*, *Pierrot*, &c. to mark their Submission. He is the most absolute Monarch in *Europe*, after the great *Turk*.

Note again, That the true *Muscovites* profess the Religion of the *Greeks*, but disguised with a vast Number of Pagan Superstitions. They do not acknowledge the Patriarch of *Constantinople*, but have a Metropolitan at *Moscow*. They hate extremely the *Catholicks*, and the *Jews*, and suffer *Lutherans* and *Calvinists*; towards *Tartary*, they are most of them Idolaters, or *Mahometans*.

A more particular Description of *Muscovy*, is as follows:

The Province of *Moscow*, contains *Moscow*, *Caluma*, *Mosaiski*, *Peski*.

The Province of *Rschow*, contains *Rschow*, *Wolosczk*.

The Province of *Twer*, contains *Twer*, *Terfach*, *Mitrow*.

The Province of *Rostow*, contains *Rostow*, *Arch. Perestaw*, *Uglitz*.

The Province of *Jaroslow*, contains *Jaroslow*, *Roma Nova*, *Ribiena*.

The Province of *Susdal*, contains *Susdal*, *Arch. Castromow*, *Jorgowitz*.

The Province of *Novogrod*, contains *Novogrod*, *Vasiligrod*, *Baligna*.

The Province of *Worotin*, contains *Worotin*, *Arool*, *Croom*.

The Province of *Rezan*, contains *Rezan*, *Preslaw*, *Tula*, *Donkagorod*.

The *WOLODIMERIA*, contains *Wolodimir*, *Murom*, *Cassimogorod*.

The *SEWIERA*, contains *Novogroduck*, *Branskow*, *Czernishaw*.

The Province of *Smolensko*, contains *Smolensko*, *Drogobust*, *Niewietz*.

The Province of *Bielski*, contains *Bielba*.

The Province of *Novogrod-wel*, contains *Novogrod-Weliki*, *Stara-Russa*, *Ladoga*, *Soltza*.

The Province of *Pleskow*, contains *Pleskow*, *Ostrow*, *Opolsko*.

The Province of *Bielosero*, contains *Gródseko*, *Glebowa*.

The Province of *Wologda*, contains *Wologda*, *Soofia*, *Strelitz*.

The Province of *Oustrioug*, contains *Oustrioug*, *Kollas*, *Dobrina*, *Cotzenga*.

The Province of *Wiatka*, contains *Wiatka*, *Orloff*, *Cblinoff*, *Slaboda*.

The Province of *Permski*, contains *Permaweliki*, *Soilumza*, *Ousgi*.

The Province of *Petzora*, contains *Petzora*, *Papinogorod*.

The Province of *Juhorski*, contains *Juhora*, *Kolgoj*, *Isle*.

The Province of *Condora*, contains *Wergaturia*, *Rocountiza*, *Seregowa*, *Ousfoma*.

The Province of *DWINA*, contains *St. Michel-Archan-gel*, *St. Nicolas*, *Lampas*, *Korela*, *Dwina*.

The Province of *KARGAPOL*, contains *Kargapol*.

The *LAPPONIA*, contains *Mouremaskoi*, *Kola*, *Sumekele*.

The Province of *TERSKOI*, contains *Jokena*, *Polinósero*.

The Province of *BELLAMORSKOI*, contains *Kandalax*, *Ombay*, *Kemi*, *Soma*.

The Kingdom of *NAGAISKI*, contains *Karmanian*, *Kagalink*, *Michacoff*.

The Province of *VACHINES*, contains *Camenisfort*, *Perwologfort*.

The Kingdom of *ASTRACAN*, contains *Astracan*, *Ickebre*, *Zaniza*, *Saratoff*, *Polooysfort*.

The Kingdom of *CAZAN*, contains *Cazan*, *Sara*, *Alatur*, *Belater*, *Malmisch*, *Kackschaga*.

The Kingdom of *BULGAL*, contains *Bulgal*, *Simber-Kogora*.

The *ZAVOLHA-HORD*, contains *Weliki Perm*, *Pascati*. *SIBERIA*, contains *Tobolk*, *Tumen*, *Japhanim*, *Poyassa*, *Beresewa*, *Narmskoya*, *Pollin*.

The Province of *OBODORA*, contains *Pobem*, *Pidaritza*, *Olsoigoud*.

The Province of *LUCANARIA*, contains *Cangoscoia*, *Solseo-gorod*.

The Province of *LOPPIA*, contains *Besowia*, *Toana*, *Tasofcoigorod*, *Zergolta*.

Note, That the different Sort of People who inhabit *Russia*, are called *Samoyedes*, *Tingoeses*, *Scribanski*, *Giusiki*, *Calami*, *Huguitski*, *Vogulici*, &c.

SCANDINAVIA.

Note, That though *Scandinavia* be but that great Peninsula, which extends itself between the Ocean and the *Baltick*, and whose Isthmus is between the Sea of *Muscovy*, and the Bottom of the Gulph of *Bothnia*; to render the Division more natural, and more easy, I'll bring under that Name all the Dominions of *Sweden* and *Denmark*, i. e. the Provinces Frontier of *Muscovy*, the Peninsula of *Jutland*, and the Isles depending thereof.

That Part of *Europe* extends from the 53 $\frac{1}{2}$ Degree of Latitude to the 72; and from the 26 of Longitude, to the 63. Its Situation, being Part in the temperate Zone, and Part in the frigid, lets us know that Cold must be excessive there, and last long; that the Quantity of Lakes, Forests, and Mountains it is cover'd with, is the Cause why the Soil produces but very little Corn, which never comes to a perfect Maturity, particularly in the frigid Zone. Its greatest Fertility is in Wood, and Mines of Copper.

SCANDINAVIA, was once under the Domination of a sole Sovereign; at present it is divided into three Kingdoms, viz. *Sweden*, *Norway*, and *Denmark*. The Sea parts the last from the two others, which are also divided from one another by a long Ridge of Mountains, which run from South to North.

The King of *Sweden* possesses the Middle of the Country, the most eastern Parts round the *Baltick*, and the Gulphs of *Bothnia* and *Finland*.

The King of *Denmark* is Master of the most western and northern Parts, viz. of the Kingdoms of *Denmark* and *Norway*.

The DOMINIONS of the KING OF SWEDEN.

This Kingdom was the last Retreat of the ancient *Goths*, who render'd themselves Masters of *Italy*, *Spain*, and Part of *France*, and were formidable to all the rest of *Europe*, in the Time of the Decline of the Roman Empire.

It extends from the 56 Degree of Latitude, to the 69; and from the 33 of Longitude, to as far as beyond the Lake *Onega*, under the 63; so that it may have 280 Leagues in its greatest Length, and 200 in its greatest Breadth.

It confines Northward with the *Danish* and *Muscovite Laponia*; Southward with *Muscovy*, again, by the *Balogne*, and the *Baltick*; and Westward with the Sea; which

which parts it from *Denmark*, and a long Ridge of Mountains which divide it from *Norway*.

The Climate of this Country is extremely cold, but very pure; and so wholesome, that the Inhabitants who do not shorten their Days by Debauchery, which is very common in *Sweden*, live commonly 120 and 130 Years.

Though Ice is seen there from *October* to *April*, the Soil produces notwithstanding, in some Places which are not marshy, a pretty good Quantity of Corn and Fruit. Near the Marshes, the Air is heavy and unwholesome; the Soil produces but little Corn, but it abounds in Pasture and Wood. The Forests are full of wild Beasts, particularly Harts, Fallow Deer, Hermine, and several other Animals. Among the great Number of Mountains, several are enriched with Mines of Iron and Copper, and some of Tin and Silver. Sea-Calves, Salmon, and Herrings are fish'd on its Coasts, and exported to all Parts of *Europe*.

There is found in *Sweden* an almost innumerable Number of Lakes, but most of them are not navigable; the most remarkable are *Ladoga*, and *Onega*, on the Confines of *Finland*; *Ula* and *Pegend* in the same Dutchy; *Wener* and *Weter*, in *Gothia*; and *Meler* in *Sweden*.

The Kingdom of *Sweden* is divided into six principal Parts, viz. *Gothy*, *Sweden*, *Lapponia*, *Finland*, *Livonia*, and *Ingria*. The three first are Westward of the *Baltick*, and of the Gulph of *Bothnia*; and the others are Eastward of the same Place.

Stockholm, situated between the *Baltick* and the Lake *Meler*, is the Capital of the Kingdom, where the King keeps his Court. Its Situation is very irregular, though its Port is esteemed the best, and most secure of *Europe*.

Note, That the *Swedes* are the best civilized People of the North; the Nobility imitate as much as they can, the *French* Manners. They are of a strong Constitution, excellent Soldiers, very hospitable, and simple in their Manners, but of an excellent and quick Understanding for all Arts and Sciences.

Note also, That the *Swedish* Government, tho' monarchical, participates a little of the aristocratick, since the Senate has a great Share in it. This Kingdom which was once elective, was rendered hereditary in the Person of *Gustavus I.* who introduced *Lutheranism* in his Dominions, where it has gain'd so much Ground ever since, that the Catholick Religion is not only entirely destroy'd in *Sweden*, but even so much abhorred, that *Sigismund* King of *Poland* lost the Crown of that Kingdom, because he had been instructed in it, and had shewed some Aversion for the new Doctrine which had spread over *Germany*.

GOTHY, or GOTLAND.

This Province which the Natives call *Gotland*, i. e. the Country of the *Goths*, is the most meridional of the Kingdom of *Sweden*; Westward it is divided by the Lake *Weter*, and the River *Lega*, into *Ostrogotland* and *Westrogotland*, i. e. Eastern and Western *Gothy*. The first includes four small Territories, viz. *Ostrogotland*, *Smaland*, *Bleking*, and *Schonon*, or *Scany*, which are found in this Order, descending from North, to South by West. The other includes also four others, viz. *Westrogotland*, *Halland*, *Dalia*, and *Wermeland*. The two first are between the Sea, and the Lakes *Weter* and *Wener*; the two others are, one Westward, the other Northward of the last of these Lakes.

S W E D E N.

The Province properly called *Sweden*, is Northward of *Gothy*, and Southward of *Lappony*, between *Norway* and the Gulph of *Bothnia*. It is divided into ten other small Provinces, situated according to the Order of my particular Description of these Dominions, ascending from the South towards the North. First, there are found four of them between *Gothy* and the River *Dalecarle*, viz. *Upland*, *Sudermania*, *Westmania*, and *Neticy*; the two first are on the *Baltick*, one Northward, the other South by West of the Lake *Meler*; the two others are

Westward of those Places. The *Gestrucia*, with the *Dalecarlia*, *Helsingia*, *Medalpadia*, and *Angermania*, take up the whole Length of the Country. The *Bothnia*, has but near 15 or 20 Leagues in Breadth, round its Gulph, from the River *Uma*, to beyond that of *Ula* in the *Cajany*, being confin'd by the *Lappony* Westward and Northward. Therefore the Part which is Westward of the Gulph is called *Western Bothnia*, and that Eastward, *Eastern Bothnia*.

S W E D I S H L A P P O N Y.

This Province is the most northern of the Kingdom of *Sweden*; it is divided into five Marks, or Countries, which borrow their Names, from five Rivers along which there are certain Cantons where the Inhabitants build their Houses with Pieces of Wood and Skins of Beasts. They transport those Houses where they think fit, and have very few inclosed Cities. Those Places inhabited by the *Lappons*, resemble well enough a Camp.

The most remarkable Rivers of *Lapponia*, are *Uma*, *Pitba*, *Lula*, *Thorn*, and *Kimi*; and of their Names have been compos'd those of the Cantons of the *Lappons*, viz. *Umalapmark*, *Pitbalapmark*, &c.

Note, That the *Lappons* are very low of Stature, but courageous and strong. Care is taken while yet in their Infancy, to inure them to cold, which is excessive in their Country, by making them go quite naked. They use the Skins of Animals for their common Cloaths.

F I N L A N D.

This Dutchy which has been lately the Theatre of a War, in the newest Mode of Fighting, was once the Appennage of the Kings of *Sweden's* Brothers. It is situated between the Gulph of *Bothnia*, and *Muscovy*, confining Northward with *Lapponia*, and Southward with the Gulph of *Finland*. There are included in the Dutchy of *Finland*, six Provinces, which are united to it, and keep the following Order. First *Cajeny* and *Finland*, on the Gulph of *Bothnia*; *Niland* and *Carelia*, on that of *Finland*; *Kexholm*, towards the Lakes *Ladoga* and *Onega*; *Savolax* and *Tavasthus* in the Middle.

I N G R I A.

This Province is inclosed between the Territories of *Muscovy*, the Lake of *Onega*, and the Gulph of *Finland*. The River *Nerva* which passes thro' it, is like a large Canal, which joins that Lake and the Gulph together. It made once Part of *Muscovy*, from which it was separated in 1617. by a Treaty of Peace between the two Crowns. It is not of a great Extent, but it is considerable for the Abundance of Game found in it.

L I V O N I A.

This Province has been several Times disputed between the Kings of *Sweden*, *Poland*, and *Muscovy*, who have been Masters of it one after another. *Poland* relinquished it to *Sweden* by the Peace of 1669, and it is become since hereditary to that Crown.

It is situated, Southward of the Gulph of *Finland*, and confines Northward with the Canal of *Nerva*, the Lake *Pibas*, and *Muscovy*; Southward with the *Duna*, which parts it from the Dutchy of *Courland*; and Westward with the *Baltick*. It is divided into two Parts, called *Estonia*, and *Lettonia*, one Northward, the other Southward.

Separated PROVINCES.

The King of *Sweden* possessed once, besides, some Provinces on the *Germanick* Ocean, and on the *Baltick*. On the first, the Emperor relinquished to him by the Peace of *Munster*, the Dutchies of *Bremen* and *Verden*, which were afterwards invaded by the King of *Denmark*, and mortgaged by him to *George I.* King of *Great-Britain*, while yet but Elector of *Hanover*, for the Sum of 19000 Ducats; and which are yet in Possession of his Son and Successor *George II.* the present King of *Great-Britain*, and Elector of *Hanover*. On the last, the Lordship, City, and Port of *Wismar* in *Mecklenbourg*: The high *Pomerania*, with Part of the lower: The Isle and

Princi-

Principality of *Rügen*, the Isles and Mouths of the *Oder*. His *Swedish* Majesty kept besides the Isle of *Oedland*, towards the Coasts of *Smaland*; the Isle of *Gotland*, more advanced into the Sea; the Isles *Oesel* and *Dage*, near the Coasts of *Livonia*; and the Isle *Aland*, with several others at the Mouth, and in the Gulphs of *Bothnia* and *Finland*. But after the unhappy Catastrophe of *Charles XII.* at *Pultowa*, and during his Flight in *Turky*, the Enemies of *Sweden* dismembered most of those Provinces from it.

Here follows a more particular Description and Division of *Scandinavia*.

SWEDEN.

The Province of *UPLAND*, contains *Stockholm*, *Upsal*, *Arch. Sigtun*, *Enköping*, *Oregrund*.

SUDERMANIA, contains *Niköping*, *Strengenes*, *Bish. Torshälsä*, *Telge*, *Trosa*.

WESTMANIA, contains *Westerås*, *Bishop. Kaping*, *Arboga*, *Bisberg*, *Bolskit*.

NERICIA, contains *Örebro*, *Corelskog*, *Linnesberg*.

GASTRICIA, contains *Gevalia*, *Coperberg*, *Folker*, *Scogskirk*, *Hamorang*.

DALECARLIA, contains *Idra*, *Lima*, *Ventan*, *Serna*, *Funesdahl*.

HELSINGIA, contains *Hudwiskwald*, *Dilsbo*, *Sueegh*, *Heeda*.

MEDALPADY, contains *Indal*, *Fors*, *Ovikin*, *Ressund*.

ANGERMANIA, contains *Nortmaling*, *Hermäsand*, *Arnes*, *Nora*, *Torsaker*.

BOTHNIA, contains *Torn*, *Kimi*, *Lula*, *Pitha*, *Uma*.

GOTHY.

OSTROGOTHY, contains *Nortköping*, *Sunderköping*, *Lindköping*, *Bishop. Schening*, *Wadsteing*, *Askesund*, *Norbä*.

SMALAND, contains *Calmar*, *Vexivæ*, *Bishop. Jänekeping*, *Westerwiik*, *Ekesjöe*, *Alem*.

BLEKING, contains *Cristianstad*, *Rotembia*, *Cristianopel*, *Trelborg*, *Elebelne*, *Usted*.

SCONEN, contains *Landen*, *Bishop. Malmoe*, *Helsingborg*, *Landskron*, *Engelholm*.

WESTROGOTHY, contains *Gottaborg*, *Bishop. Faleköping*, *Lideköping*, *Hio*, *Bretta*, *Scara*, *Mariestad*, *Bogesund*.

HALLAND, contains *Helmstad*, *Falkemborg*, *Waerborg*, *Labolm*, *Limberga*.

DALY, contains *Daleborg*, *Tweta*, *Killen*, *Holm*, *Millefwick*.

WERMELAND, contains *Carolstad*, *Kyla*, *Rada*, *Kollen*, *Lifwick*.

LAPPONIA.

UMALAPMARK, contains *Loisbi*, *Semifierfi*.

PITHALAPMARK, contains *Anierfui*, *Lochari*.

LULALAPMARK, contains *Torpajaar*, *Iokomaka*.

TORNAPMARK, contains *Tingwara*, *Swoncavara*, *Segwara*, *Kitilabi*.

KIMILAPMARK, contains *Kolajersfui*, *Sodenkile*, *Kierfui*.

FINLAND.

The Province of *CAJANY*, contains *Coyoneborg*, *Jo*, *Ula*, *Limingo*, *Wassa*.

FINLAND, contains *Burnborg*, *Abo*, *Raumo*, *Nystad*, *Raseborg*, *Wesflax*.

NILAND, contains *Helsingfors*, *Borga*, *Perno*, *Elima*.

CARELIA, contains *Wybourg*, *Mala*, *Webelax*.

SAVOLAX, contains *Nislot*, *Pexama*, *Roxclax*, *Rumala*.

TAVASTHUS, contains *Tavasthus*, *Jamse*, *Pizkala*.

KEXHOLM, contains *Kexholm*, *Lena*, *Taipal*, *Porensa*.

LIVONIA.

ESTONIA, contains *Nerva*, *Revel*, *Hapsel*, *Pernaw*, *Derpt*.

LETTONIA, contains *Riga*, *Dunemund*, *Marienburg*, *Cruetbourg*.

INGRIA, contains *Nuttborg*, *Juanogorod*, *Caporia*, *Jamagorod*.

POMERANIA, contains *Stralsund*, *Bardt*, *Wolgast*, *Anklam*, *Stetin*, *Gertz*, *Dam*.

The Dutchy of *BREMEN*, contains *Bremen*, *Staden*, *Carlstad*, *Bontebude*. ——— *VERDEN*, Dutch. *Wildbensen*.

The Lordship of *WISMAR*, contains *Wismar*, only.

ISLES.

RUGEN, contains *Bergben*, *Newschans*.

OELAND, contains *Borkholm*, *Otteambi*.

GOTLAND, contains *Wistby*, *Norwick*.

OESSEL, contains *Arnsberg*, *Sonneberg*.

DAGO, contains *Dageroot*.

ALAND, contains *Castelholm*, *Usedom*, *Isle*, *Grollin*, *Isle*.

DENMARK.

This Kingdom was once the Country of the antient *Cimbres*, or *Cimbri*, whose Name has been rendered famous in *Europe* by their Conquests, and who gave the Name to the *Cimmerian Bosphorus*, between *Europe* and *Asia*, and to the *Cimbrick Chersonesus*.

It has receiv'd its last Name from the first of his Kings, called *Dan*, of which has been composed the Name of *Denmark*, i. e. *Country of Dan*.

It extends from about 54 Deg. 50 Min. of Latitude, to the 58. 20 Min. and from the 29. 15 Min. of Longitude, to the 34. 45 Min. Therefore it may have about 90 Leagues in its greatest Extent from South to North, and 50 from East to West; from *Copenhagen* to the western Coast of the Diocese of *Rippen*.

It confines Northward and Eastward with the Sea, which parts it from *Norway* and *Sweden*, and with the *Baltick*; Southward with *Germany*; and Westward with the Ocean.

The Climate of the Country is extremely cold, notwithstanding which it is very fertile in Corn and Pastures. It feeds a great Number of Horses and Oxen, which are exported into *Germany*. A great Quantity of Fish is fish'd on its Coasts, particularly Herrings; and it abounds with Game of all Sorts.

It has no very considerable Rivers, but only a Lake in the North of *Jutland*, which is pretty spacious.

This Kingdom may be divided into two principal Parts, which are the Peninsula of *Jutland*, and the Isles Northward of it.

JUTLAND, is a Peninsula, called antiently, *Cimbrick Chersonesus*; it is divided into *South-jutland*, and *North-jutland*, one Southward, the other Northward, as express'd by their Names.

SOUTH-JUTLAND, includes the Dutchies of *Holstein*, and of *Sleswick*. The first contains four small Provinces, viz. *Holstein*, *Ditmarsen*, *Stormaren*, and *Wagheren*.

NORTH-JUTLAND, is subdivided into four Dioceses, viz. *Rypen*, *Arhusen*, *Wybourg*, and *Albourg*. The first is Southward, the second and third in the Middle, and the fourth Northward.

Among the Isles of *Denmark*, there are nine of a pretty considerable Extent; since the least of them has more than 60 Leagues in Circuit. Those Isles are, *Zeland*, *Fuinen*, *Langeland*, *Laland*, *Falster*, *Mone*, *Alsen*, *Femeren*, and *Bornholm*.

ZELAND, has near 60 Leagues of Circuit, 18 in Length, and 15 in Breadth. *Fuinen* may have 45 Leagues of Circuit, 15 long, and 13 broad. The others are a great deal less. Besides these, *Denmark* has those of *Lessø*, Eastward of the Diocese of *Alborg*; *Anbout*, between that of *Wybourg*, and the Country of *Holland*; *Heselo*, Northward of *Zeland*; *Samse*, Northward of *Fuinen*; *Azzoe*, Southward of it, and the Isle of *Wen*, in the Streight of the *Sund*, where is seen the Cattle of *Uranibourg*, famous for the Observations of *Tycho Brabe*.

Between the Isles of *Zeland*, and the Province of *Schonen* in *Sweden*, is found the famous Streight of the *Sound*: Between the same Island, and that of *Fuinen*, is that they call *Belt*; and between this last Isle, and *Jutland*, is found that of *Middelfat*, or *Little Belt*; this Word *Belt*, signifies Streight, in the antient Danish Language.

Note, That there are several Cities in *Denmark*, as well as in *Sweden*, which terminate in *Keping*, which signifies a Market Place.

The Capital of *Denmark*, is *Copenhagen*, in the Isle of

of *Zeland*, on the Coast which looks towards *Sweden*; Its Name signifies *Harbour of Merchants*. It is famous for the Coronation of its Kings, for their Residence there, and its great Commerce.

Note, That the *Danes* differ very little in Manners from the *Swedes* and *Germans*, except that they are more proud and more cunning. They are industrious and parsimonious, and love the Arts and Sciences, but love Wine far better.

Note also, That the Kingdom of *Denmark* was elective, till the *Danes* render'd it hereditary in the House of *Frederick III.* The Nobility has a great Share in the Government, which notwithstanding is entirely monarchical; the *Danes* in general are very loyal Subjects, and very affectionate to their King.

Note, again, That the Catholick Religion had been followed in *Denmark*, during more than 500 Years, till *Frederick I.* Duke of *Holstein*, having been elected King in 1525, after the Degradation of *Christian II.* his Nephew, introduced *Lutheranism* in his Dominions, to gain thereby the Protection of the Princes of *Germany*, who follow'd the new Doctrine; and ever since the Kings of *Denmark* would suffer no other Religion to be publicly professed in their Dominions; though the Clergy retain yet the Titles, Ornaments, and Ceremonies of the *Romish Church*, having Archbishops, Bishops, Prebends, &c. who officiate with the Surplice, the Stole, &c.

N O R W A Y.

This Country is call'd *Norway*, as if one would say northern Road, because it is the Part of *Europe* which extends most towards the North. It had antiently its particular Kings, till *Waldemar II.* who dying left an only Daughter, who was married to *Haguin* King of *Denmark*; thus the two Kingdoms were united; and ever since the Kings of *Denmark* have stiled themselves Kings of *Denmark* and *Norway*.

It has almost the Form of an extended Fish, along *Sweden*; taking up, in Latitude, from the 58 Degree, to the 71 $\frac{1}{2}$; and in Longitude from the 26 to the 54 Degree; but so that it has more than 300 Leagues in Length from South to North, from the Point which looks towards *Jutland*, to *Wardbus* in *Lapponia*; its greatest Breadth scarce exceeding 70 Leagues, and its lesser 10 or 12.

It confines Northward, Westward, and Southward, with the Ocean; Eastward with the River *Glama*, and a long Ridge of Mountains which part it from *Sweden*.

The Climate is so cold, particularly Northward, that the Soil has scarce Strength enough to produce any Thing; it being, besides, full of Rocks which render it sterile. There is found, Eastward, a great Quantity of Mountains; and Westward, several Gulphs. None but the *Glama*, of all its Rivers, can carry Boats of any considerable Bigness: There is one seen near *Drontheim*, whose Waters never freeze, let the Cold be ever so excessive.

NORWAY is divided into five Governments, found in the following Order, going from South to North; first that of *Babus*, situated along the River *Glama*, and on the Coast which looks to the Point of *Schaw*, in *North-Jutland*; that of *Aggerbus*, of *Bergenbus*, of *Drontheimbus*, and of *Wardbus*, which includes the *Danish Lapponia*.

Along the Western Coast is found a very great Number of Isles; among which the most considerable are those of *Maghero*, which is the most Northern; then, descending, *Suro*, *Samen*, *Tranmes*, *Stegen*, *Loffoten*, *Hiteron*, &c. Near this last there is a Whirlpool of Water, which the *Danes* call *Maelstrom*, in which they say Ships are lost, as in an Abyss.

The City of *Drontheim* was once the Capital of *Norway*, but at present *Berghen* is reputed for such; and the Viceroy, or principal Governor of the whole Country, resides there.

Note, That the *Norwegians* are simple enough; but they have an excellent Quality, which is that of being hospitable, and very kind to Foreigners: There are

very few Thieves among them, perhaps because there is little or nothing to steal, the Country being sterile, and little frequented.

Note, also, That besides the Viceroy, or principal Governor, whom the King of *Denmark* keeps in *Norway*, there are five general Governors, who reside in the Castles from whence their Governments borrow their Names, viz. *Babus*, *Berghenbus*, &c.

Note, again, That the *Norwegians* follow the same Religion which is professed in *Denmark*; and there are found yet in *Lapponia*, People who adore the Sun, the Fire, the Forests, Serpents, &c.

A more particular Description of *Denmark*, is as follows:

J U T L A N D.

SOUTH-JUTLAND.

HOLSTEIN, contains *Kiel*, *Rensborg*, *Newmonser*, *Wilftet*.

DITMARSEN, contains *Lunden*, Arch. *Weislinburgen*, *Heiden*.

STERMAREN, contains *Glukstad*, *Krempe*, *Pinnenberg*, *Bramstedt*.

WAGHEREN, contains *Segelberg*, *Oldembourg*, *Lutkenbourg*, *Ploen*.

SLESWICK, contains *Sleswick*, Bishop. *Gottorpstad*, *Frederiker*, *Toningen*, *Flenbourg*, *Tunderen*, *Haderleben*.

NORTH JUTLAND.

The Diocese of *RYPEN*, contains *Rypen*, Bishop. *Colding*, *Frederikcode*, *Weel*, *Rinkoping*.

The Diocese of *ARHUSEN*, contains *Arhusen*, Bishop. *Underup*, *Ebelto*, *Grinnu*, *Mariaker*, *Hobro*.

The Diocese of *WYBOURG*, contains *Wybourg*, Bishop. *Lemwick*, *Hoftebro*, *Wegerby*, *Seby*.

The Diocese of *ALBORG*, contains *Alborg*, Bishop. *Huls*, *Nikøping*, *Huggerby*, *Scawen*, *Hirring*, *Tystad*.

I S L E S.

ZELAND, contains *Copenhagen*, *Elfsneur*, *Frederiksborg*, *Roskild*, Bishop. *Nikøping*, *Kallemborg*, *Korsar*, *Warborg*, *Prestøe*.

FUINEN, contains *Odensae*, Bishop. *Niborg*, *Woborg*, *Sevenborg*, *Middlefart*.

LANGELAND, contains *Rudkøping*, *Tanker*.

LALAND, contains *Naskow*, *Maribo*, *Rodby*, *Nistadt*.

FALSTER, contains *Nikøping*, *Stubkøping*.

MONE, contains *Steka*.

ALSEN, contains *Northburg*. — *ARRÆ*, *Køping*.

FEMEREN, contains *Burg*, *Tassen*, *Ketrop*.

BORNHOLM, contains *Rotteemby*, *Nex*.

AMAG, *Amag*. — *WEN*, *Uranibourg*. — *SAMSOE*, *Samsoe*. — *ENDELO*, *Endelo*. — *LESLO*, *Hacs*. — *SYLT*, *Fyredrop*. — *NORTHSTAND*, *Pelworm*.

NORWAY,

The Government of *DRONTHEIMHUS*, contains *Drontheim*, *Wisk*, *Ostraford*, *Malager*, *Alenby*, *Evenes*, *Wardal*, *Melus*, *Mellang*, *Asfenk*, *Store*, *Opdael*, *Schordael*.

The Government of *BERGHENHUS*, contains *Berghen*, *Hulno*, *Staffanger*, *Soyde*, *Arnedal*, *Northolm*, *Lund*, *Helmelandt*, *Jelfo*, *Eide*.

The Government of *AGGERHUS*, contains *Obflo*, *Scken*, *Moss*, *Holen*, *Tronsberg*, *Tolen*, *Hammer*, *Gustall*, *Dofre*, *Frederikshal*, where the brave *Charles XII.* King of *Sweden* was unfortunately ———.

The Government of *BAHUS*, contains *Babus*, *Oddevalla*, *Berg*, *Esberg*, *Aremark*, *Fect*.

The Government of *WARDHUS*, contains *Wardbus*, *Ulzicki*, *Hoop*, *Waranger*, *Tannebay*.

G R E A T - B R I T A I N.

Authors are extremely divided on the Origin of the Name of *BRITAIN*: Some derive it from the Word *Pryd*, which in the old Language of the Country signifies *Beauty*: Others will have the Name to have been form'd from another old Word *Brit*, which signifies *Paint*; because the antient Inhabitants of some of those Isles used to paint their Bodies; which is the Reason why they were call'd by the *Romans*, *Picti*: The one pretends that the *Britons*, expell'd from what is call'd at present *Great-Britain*, by the *Saxons* and *English*, whom they

they had call'd to their Succour, cross'd over into *France*, and settled in one of the *Armorick* Provinces, to which they gave their Name; and the Traductor of *Bede* says, that this Isle was call'd *Albion*, till the *Britons*, People from *France*, gave it their Name, at their first settling in the Country. *Chamberlayne* says, that *England*, the better Part of the best Island in the whole World, antiently with *Scotland*, call'd *Britain*, and sometimes *Albion*, was about 800 Years after the Incarnation of *Christ*, (by special Edict of King *Egbert*, descended from the *Angles*, a People of the *Lower Saxony*, in whose Possession the greatest Part of this Country then was) nam'd *Angle*, or *England*.

The *British* Isles are Northward of *France*, from which they are separated by the *British* Channel: They extend from the $50\frac{1}{2}$ Degree of Latitude to the 59; and from about the $9\frac{1}{2}$ of Longitude to the $22\frac{1}{2}$.

The first and greatest of those Isles, call'd *Great-Britain*, contains the Kingdom of *England* and *Scotland*; that Westward of it is call'd *Ireland*. The other Isles, which are great deal lesser, are found most of them Northward of these: The most considerable of them are the *Orcades*, &c. which are Dependencies of the Kingdom of *Scotland*.

These Kingdoms are under the Domination of the King of *Great-Britain*, commonly call'd King of *England*, ever since the Year 1607; when *James VI.* King of *Scotland*, and first of that Name of *England*, united these three Kingdoms, and took the Title of King of *Great-Britain*, to avoid giving Preference to either of them. *Elizabeth*, Queen of *England*, dying, declar'd him her Successor, with the Consent of her Parliament, tho' she had inhumanly caused *Mary Stuart* his Mother, and Widow of *Francis II.* King of *France*, to be brought upon a Scaffold, and beheaded, after she had detained her 18 Years in Prison; violating thereby the Laws of Hospitality, which are the most sacred among Mankind; sacrilegiously usurping a Power which the King of Kings has reserved to himself alone, of punishing Sovereigns for the Crimes they may be guilty of; insulting to the Royal Majesty, and giving a very bad Example to her Subjects, which perhaps encouraged them to perpetrate the same on the sacred Person of their Royal Sovereign *Charles I.*

Note, That *Ireland* lost the Title of Kingdom in 1172; and that ever since that Time, the *Irish* having call'd *Henry II.* King of *England* to their Succour against the *Norwegians*, and deferred to him all the Authority, he and his Successors contented themselves with the Quality of *Lords of Ireland*, till *Henry VIII.* This King at the Solicitation of some Factious, to whom the Name of Lordship seem'd despicable, caused himself to be call'd King of *England*, and of *Ireland*; which was confirm'd by Pope *Paul IV.* in 1555, for Queen *Mary*, Daughter of *Henry*.

The KINGDOM OF ENGLAND.

This Kingdom is the greatest of the three I have mention'd: The *English*, People of *Lower Saxony*, who were call'd into it, as I have already observ'd, by the Natives, gave it their Name.

It is situated in the southern Part of the Isle of *Great Britain*, and extends in Latitude from the $50\frac{1}{2}$ Degree to the 66, and in Longitude from the 14 to the $22\frac{1}{2}$; so that it may have more than 100 Leagues in its greatest Extent from South to North; and 110, 90, 40, and 30 from East to West.

It has for Bounds, and is separated from *Scotland* by the River *Solway*, the Mountain *Cheviot*, and the River *Tweed*; Half whereof, on the Side of its Source, is in *Scotland*, and the other Half makes justly the Separation; Eastward it has the *Germanick* Ocean; Southward it is separated from *France* by the Channel; and Westward the *Irish* Sea serves for common Bounds to both Kingdoms.

The Winter is longer in *England*, but less cold than in *France*; and the Summer is neither so long nor so hot, because of the frequent Rain and Fogs; which notwithstanding, the Climate had been accounted very wholesome, and little subject to Maladies, till of late Years.

The Soil is extremely fertile in Corn of all Sorts, and Fruits; and though it produces little or no Wine, the excellent Beer made in *England* supplies abundantly that Want. The Hills and Valleys are cover'd with almost an infinite Number of Sheep, whose Wool is the best in the whole World. No Wolves are seen in it, and but very few Asses and Mules. It abounds with Mines of Copper, Iron, Tin, Lead, Sea-Coals, and other Minerals. Beef and Pork is there better tasted, than in any other Parts of *Europe*.

There are very few Lakes in *England*; but it has several Rivers, and some of them very considerable, as the *Thames*, which is one of the most famous of the Universe, and springs from the County of *Glocester*, passes at *Oxford* and *London*, and disembogues into the Sea; the *Severn*, which has its Source in *North-Wales*, passes at *Shrewsbury*, *Worcester*, and *Glocester*; the *Humber*, which is but an Arm of the Sea, into which disembogue the Rivers *Derwent*, *Trent*, *Aire*, *Worfe*, &c.

The *English*, and *Saxons*, after they had expelled the Natives, divided it into seven Kingdoms, which Division was call'd *Heptarchy*; and which was kept in that State, till King *Egbert* re-united them all into one; and as that Division seems to me very easy and natural, I'll make use of it in the following Order: First, Eastward are found on the Coast, the Kingdoms of *Essex*, *East-Anglia*, and *Kent*; the first in the Middle, the second Northward, and the third Northward of this; separated from one another by the *Thames*.—Southward are found on the Channel, the Kingdoms of *Sussex* and *Wessex*, one Eastward, and the other, which is six Times as large, Westward.—Westward, on the *Irish* Sea, is found the Principality of *Wales*.—The Kingdom of *Northumberland* is Northward, contiguous with *Scotland*, between the *German* and the *Irish* Seas. Lastly, the Kingdom of *Mercia* in the Middle of all these.

This Kingdom contains 52 Counties, called in the Language of the Country, *Shires*; which will be found in Order in my particular Division of it.

The antient Kingdom of *Essex*, contains three Counties, the first and biggest thereof, is called by the same Name, and is situated on the Sea; the two others, viz. *Middlesex*, and *Hertford*, are found Westward of it, one towards the South, and the other towards the North; but because the City of *London*, Capital of the whole Kingdom, is in the County of *Middlesex*, I'll give it the first Rank, and that with some Justice.

EAST-ANGLIA, includes the Counties of *Suffolk* and *Norfolk*, on the Sea; and that of *Cambridge*, situated Westward of them.—The City of *Cambridge* is famous for its University.

The antient Kingdom of *KENT*, admits of no Subdivision, and contains but the County of the same Name: It is the Country of the whole Kingdom nearest *France*.—The City of *Canterbury*, which is the Capital thereof, is an Archiepiscopal See; the Archbishop thereof stiles himself *Primate of all England*.

The Country of *SUSSEX*, contains two Counties; the first, which bears the same Name, is on the Channel, over-against *Normandy*; and the other, call'd *Surry*, is between that of *Sussex* and the *Thames*.

In the Kingdom of *WESSEX*, are found seven Counties, going from East to West; first on the Channel, *Hampshire*, *Dorset*, *Devon*, and *Cornwal*; *Berks*, *Wilts*, and *Somerset*, which are Northward of the two first.

The Principality of *WALES*, which is the Appennage of the Eldest Son of the King of *England*, was once divided into several small Kingdoms, till *Roderick the Great*, who made himself King of the whole Country. It is divided, at the River *Dowey*, into *North-Wales* and *South-Wales*; and each Division contains six Counties: In the first are found six, round the Coasts, in the following Order, beginning towards *Northumberland*; first *Flint*, afterwards *Denbigh*, *Carnarvon*, *Anglesey* Island, *Merioneth*, and *Montgomery*, which is the most inland County of the six.—In the second are found four, likewise round the Coast, and following always the same Road, viz. *Cardigan*, *Pembroke*, *Carmarthen*, and *Glamorgan*, at the Mouth of the *Severn*; *Brecknock* and *Radnor* are more advanced towards *Mercia*: Some place it in the

Dutchy

Dutchy of *Monmouth*, but the best *Geographers* leave it in the Kingdom of *Mercia*.

Note, That the *Welsh* have always equal'd (not only in my Opinion, but even in that of the best and most impartial Historians of all Nations and Ages) in Courage and Bravery, the most warlike Nations of *Europe*, and have been rivall'd by none: They have gain'd several signal Advantages against the formidable Power of their Enemies, and have never been thoroughly conquered: They are free, sincere, liberal, and extremely affable to Foreigners; Hospitality being a Virtue much practis'd among them: Within their Mountains there are yet several noble Families which could challenge the most illustrious Houses of *Europe* for Antiquity: They have a very good Understanding, and sound Wit.

The Kingdom of *NORTHUMBERLAND*, is more extended than any of those I have mention'd: and is divided into six Counties; three of which are found on the *Germanick* Ocean, viz. *York*, *Durham*, and *Northumberland*; thus in Order, in going from South to North: The three others, viz. *Lancaster*, *Westmoreland*, and *Cumberland*, are found in the same Order, on the *Irish* Sea; and following the same Road.

The County, or Dutchy of *YORK*, is the greatest Province of *England*, and the Appenage of the King's Brother. Its Capital, *York*, is an Archiepiscopal See, whose Archbishop stiles himself, *Primate of England*; and is situated on the River *Ouse*.

The County of *LANCASTER*, is also very renown'd in History for the long Wars between the two Royal Houses of *York* and *Lancaster*, under the Denomination of the *white* and *red Rose*. Some Authors have observed, that thirty Battles had been fought during those Wars, and that there had been kill'd in them three Kings of *England*, one Prince of *Wales*, twelve Dukes, one Marquis, nineteen Earls, twenty-three Barons, and a vast Number of several other Persons of Quality. Its Capital, which bears the same Name, is situated on the River *Lon*.

MERCIA, which is in the Heart of *England*, was the largest Kingdom of all those abovemention'd: It contains eighteen Counties, seven of which are found Eastward, thus in Order, going from South to North, viz. *Oxford*, *Buckingham*, *Bedford*, *Northampton*, *Huntington*, *Rutland*, and *Lincoln*: Six in the Middle, following the same Road, viz. *Glocester*, *Warwick*, *Leicester*, *Stafford*, *Derby*, and *Nottingham*: The five others are Westward, and Frontiers of *Wales*, viz. *Monmouth*, which is toward the Mouth of the *Severn*, *Hereford*, *Worcester*, *Salop*, and *Chester*.

The City of *OXFORD*, situated on the *Thames*, has a very celebrated University, and the second in *Europe* for Antiquity: It is also an Episcopal See.

The Isles depending on the Kingdom of *England*, are the Isles of *Man*, and *Anglesey*, in the *Irish* Sea, which bear the Title of Counties; the first of the two having bore that of Kingdom for 200 Years successively, or more: The Isle of *Wight*, in the Channel, near the Coast of *Southampton*: *Jersey* and *Guernsey*, near those of *Normandy*: The *Sorlingues*, Westward of *Cornwall*, which are 145 in Number, among which there are 12 principal, which have all Tin Mines.

The Capital of *England* is *LONDON*, situated on the *Thames*, in the County of *Middlesex*: It is one of the largest, fairest, and most trading Cities of the whole World; the Place of Residence of the King, and Parliament, and an Episcopal See.

Note, That the Divine Providence seems to have taken as much Pleasure in adorning the Inhabitants of this terrestrial Paradise, with her most precious Gifts, as she has in enriching their Soil with Fertility, and Plenty of all Things; for the *English* are extremely witty, dexterous, brave, well made, and most of them handsome; so that the Nobility, Gentry, and the most sensible Part of the Nation, have received from Heaven and Nature all that it was in their Power to give. Besides the above-mention'd Perfections, the ancient *English* Nobility and Gentry are liberal, hospi-

table, and affable, encourage the Arts and Sciences; and are easily mov'd to Compassion: They are free from those national Prejudices, and insupportable Presumption, Foreigners reproach the *English* Nation with, which are Vices found no where in *England* but among the most despicable Rabble, that nothing is good, and nothing great, but in their own Country; that Courage, Wit, Wisdom, Learning, &c. are to be found no where else; since the *English*, I mean those who have the least Education, are always inclin'd to render Justice to Merit, wherever they find it, without Distinction of Person, or Country; of which I can speak pertinently, since I have studied them long enough, to be convinced, that the Supposition that the *English* Nation is inhospitable, and treat Foreigners in a barbarous Manner, is false and scandalous; it is true, that the Vulgar are not very courteous, when they are in a Body, but take even every one of them apart, you'll find that their Brutality is not natural in them; but, that on the contrary, they have true Sentiments of Justice and Humanity; for if in their tumultuous Assemblies they appear so ready to insult Foreigners, when, by themselves, they are as ready to help, or assist them: All the *English* can be reproached of, with some Appearance of Justice and Reason, is of being a little too litigious.

Note, also, That tho' the Kingdom of *Great Britain* be hereditary, and even to Females, for Want of Issue Male, the Government is as much Aristocratical, and Democratical, as Monarchical, because of the Power of the Parliament, composed of two Houses; the first call'd the higher House, because composed of the Lords both Spiritual and Temporal of the Kingdom, where the King presides; and the other the lower House, or of the Commons, composed of the Deputies of the Cities, Towns, Boroughs, and Sea-Ports of the Kingdom, which have Right of sending to that august Assembly: This Right, though not quite so antient as the first Establishment of the *English* Monarchy, since granted by the Kings themselves, the *English* are very jealous of, and have made from Time to Time several courageous and bold Stands to preserve it in the Purity of its first Establishment, against those who have attempted to invade it; which has often been consider'd by those who are ignorant, or will be ignorant of the Constitution of the Kingdom, as an Effect of their Inconstancy and Disloyalty; but which proceeded, in Fact, from that natural Inclination all Men have for Freedom and Liberty: Tho' there have been found Factious in *England*, as well as in other Places, who, utter Strangers to their own Happiness, could not be persuaded to be ever easy under the most mild Government; but imagine, falsely, that a King incroaches on their Privileges and Liberties, when he has not the ridiculous Complaisance of being entirely govern'd by them, or refuses to follow blindly the Impetuosity of their extravagant Imagination.

Note, again, That *Calvinism* has been for a long Time, since the Reformation, the reigning Religion in *England*; but the *English* Church has relinquish'd several of those desperate Dogma's with Regard to Grace, Merit, Free-Will, &c. which she has found incompatible with the infinite Mercy of God, and his Justice: Notwithstanding which, all Sorts of Religions are tolerated in *England* except the *Catholics*; for there are found in it *Zuinglians*, *Hussites*, *Calvinists*, *Lutherans*, *Anabaptists*, *Jews*, &c. who have all the free Exercise of their Religion.

Here follows a more particular Description, and Division of the Kingdom of *England*.

ENGLAND.

ESSEX.

The County of *MIDDLESEX*, contains *London*, Bishop. *Staines*, *Uxbridge*.

The County of *HERTFORD*, contains *Hertford*, *Ware*, *St. Albans*, *Barkway*.

The County of *ESSEX*, contains *Colchester*, *Malden*, *Walden*, *Witham*, *Tilbury*, *Barking*, *Harwich*.

The County of KENT, contains *Canterbury*, Arch. *Rocheſter*, Biſhop. *Dover*, *Tunbridge*, *Hythe*, *Sandwich*, *Graveſend*, *Greenwich*.

EAST-ANGLIA.

The County of SUFFOLK, contains *Ipswich*, *Bury*, *Midnal*, *Orford*.

The County of NORFOLK, contains *Norwich*, Biſh. *Yarmouth*, *Lynn-Regis*, *Cromer*, *Thetford*.

The County of CAMBRIDGE, contains *Cambridge*, *Univerſ. Ely*, Biſhop. *Wiſbich*, *Royſton*.

The County of SUSSEX, contains *Chicheſter*, Biſhop. *Haſtings*, *Rye*, *Lewes*, *Arundel*.

The County of SURREY, contains *Kingſton*, *Guilford*, *Newark*.

WESSEX.

The County of SOUTHAMPTON, contains *Southampton*, *Wincheſter*, Biſhop. *Stockbridge*, *Hurſt*, *Ringwood*, *Portſmouth*.

The County of DORSET, contains *Dorcheſter*, *Lime*, *Sherborn*, *Winborn*.

The County of DEVON, contains *Exeter*, Biſhop. *Sydmouth*, *Plymouth*, *Totnes*, *Barnſtable*, *Bideford*, *Hatterley*.

The County of CORNWALL, contains *Bodmyn*, *Launceſton*, *Low*, *St. Ives*, *Padſtow*, *Helſton*.

The County of BERKS, contains *Windſor*, *Abingdon*, *Newbury*, *Reading*, *Oakingham*.

The County of WILTS, contains *Salisbury*, Biſhop. *Wilton*, *Anebury*, *Mahneſbury*, *Blandford*, *Calne*.

The County of SOMERSET, contains *Bath*, Biſhop. *Briſtol*, Biſhop. *Glaſtenbury*, *Wells*, *Bridgwater*.

The Iſle of WIGHT, contains *Newport*.

The Iſle of JERSEY, contains *St. Hilary*, *St. Aubin*.

The Iſle of GUERNSEY, contains *St. Peter*.

The Iſles of SORLINGUES, contain *St. Mary*.

PRINCIPALITY OF WALES.

NORTH-WALES.

The County of FLINT, contains *Flint*, *St. Aſaph*, Biſh. *Cayerwis*.

The County of DENBIGH, contains *Denbigh*, *Ruthin*, *Wrexham*, *Abercon*.

The County of CAERNARVON, contains *Caernarvon*, *Bangor*, Biſhop.

The Iſle of ANGLESEY, contains *Beaumaris*, *Newburg*, *Aberfraw*.

The County of MERIONETH, contains *Harlech*, *Bala*, *Barmouth*, *Dolgelbe*, *Aberdony*.

The County of MONTGOMERY, contains *Montgomery*, *Llanwilling*, *Lluidlos*.

SOUTH-WALES.

The County of CARDIGAN, contains *Aber-yſtwyth*, *Llanbeder*.

The County of PEMBROKE, contains *Pembroke*, *St. David*, Biſhop. *Newport*, *Haverford*.

The County of CAERMARTHEN, contains *Caermarthen*, *Kydwiller*, *Abermals*.

The County of GLAMORGAN, contains *Cardiff*, *Landaff*, Biſhop. *Aber-avon*, *Swanſey*.

The County of BRECKNOCK, contains *Brecknock*, *Bealt*, *Hay*.

The County of RADNOR, contains *Radnor*, *Knighton*, *Preſteigne*.

NORTHUMBERLAND.

The County of YORK, contains *York*, Arch. *Hull*, *Richmond*, *Doncaſter*.

The County of DURHAM, contains *Durham*, Biſhop. *Darlington*, *Harlepool*.

The County of NORTHUMBERLAND, contains *Newcaſtle*, *Berwick*, *Alnwick*.

The County of OXFORD, contains *Oxford*, Biſhop. *Bambury*, *Tame*.

The County of BUCKINGHAM, contains *Buckingham*, *Colebrook*, *High-Wickham*, *Amerſham*.

The County of BEDFORD, contains *Bedford*, *Dunſtable*, *Shefford*.

MERCIA.

The County of LANCASTER, contains *Lancaſter*, *Mancheſter*, *Preſton*, *Blackburn*.

The County of WESTMORELAND, contains *Kendal*, *Kirkby*, *Appleby*.

The County of CUMBERLAND, contains *Carlisle*, Biſh. *Penriſh*, *Egremont*.

The County of NORTHAMPTON, contains *Northampton*, *Berkley*, *Daventry*.

The County of HUNTINGDON, contains *Huntingdon*, *St. Ives*, *Kimbolton*.

The County of RUTLAND, contains *Ockham*, *Uppingham*.

The Iſle of MAN, contains *Douglas*.

The County of LINCOLN, contains *Lincoln*, Biſhop. *Grantham*, *Barton*, *Boston*, *Stamford*.

The County of GLOCESTER, contains *Gloceſter*, Biſh. *Berkley*, *Tewksbury*, *Cirenceſter*.

The County of WARWICK, contains *Warwick*, *Coven-try*, Biſhop. *Rugby*.

The County of LEICESTER, contains *Leiceſter*, *Dun-nington*, *Lutterworth*.

The County of STAFFORD, contains *Stafford*, *Litchfield*, *Burton*.

The County of DARBY, contains *Darby*, *Bankevel*, *Cheſterfield*.

The County of NOTTINGHAM, contains *Nottingham*, *Newark*, *Bliſh*, *Workſhop*.

The County of MONMOUTH, contains *Monmouth*, *Abergavenny*, *Chepſtow*, *Newport*.

The County of HEREFORD, contains *Hereford*, Biſh. *Leominſter*, *Roffe*, *Pembridge*.

The County of WORCESTER, contains *Worceſter*, Biſhop. *Bewdley*, *Upton*.

The County of SALOP, contains *Shrewſbury*, *Bridge-north*.

The County of CHESTER, contains *Cheſter*, Biſhop. *Alfringham*, *Condate*.

SCOTLAND.

This Country, which the Antients called *Caledonia*, and thoſe of the Country call at preſent *Albany*, is one of the moſt antient Monarchies in the World; though there was an Interregnum of 41 Years, after the Death of *Eugenius I.* to *Fergus II.* who reſtor'd the *Scottiſh* Monarchy in 422.

It is ſituated at the North of *England*, to which it is contiguous, taking up the northern Part of the Iſle of *Great-Britain*. It extends from the 55 Degree of Latitude, to the 59; and from the 14½ of Longitude, to the 19½; without including the Iſles depending of it. Some of which begin Weſtward of it, from the 12 Degree of Longitude, and the others advancing towards the North, as far as beyond the 61 Degree of Latitude; ſo that it has about 72 Leagues in its greateſt Extent from South to North, I mean the main Land; and 60 from Eaſt to Weſt.

The Climate is colder than in *England*, and the Soil not near ſo fertile in Corn, for it produces no other than Rye, Barley, and Oats, of which the Inhabitants make pretty good Bread. It abounds with Sheep, Oxen, and formerly with wild Beaſts, particularly Wolves of a monſtrous Bigneſs. There is a great Plenty of Fiſh on the Coaſts, eſpecially Salmon, Herrings, and Oyſters which bear Pearls, among which there are found ſometimes very fine ones. Its Mountains, which are in great Number, have Mines of Iron, Lead, Sulphur, and Azure. Iron, Lead, Leather, and Fiſh, are the chief Commodities of the Country, and the whole Commerce of the Inhabitants.

The moſt remarkable of its Rivers are, the *Tay*, *Twede*, *Nittle*, *Chyd*, *Spey*, *Dee*, and *Don*. It has ſeveral Gulphs, among which thoſe of *Edinburgh* and *Dumbrison* are the moſt famous; and in the great Number of its Lakes, thoſe of *Nefſ*, *Lomund*, *Loſs*, and *Louth*, are the moſt remarkable. It is pretended that the fiſt never freezes, no more than its River, let the Cold be ever ſo ſevere; in the ſecond is ſeen a floating Iſland among ſeveral others.

The River *Tay* divides *Scotland* into two Parts, one Southern, which was once the Kingdom of the *Picts*; the other Northern, which was that of the *Scotch*. I'll place the Iſles belonging to it for a third Part.

In the ſouthern Part, if we begin at the Coaſt on the *Germanick* Ocean, we'll find, fiſt five Counties in the following Order, round the Gulph of *Edinburgh*, beginning at the ſouthern Coaſt of its Mouth, viz. *Lo-*
thian,

thian, Sterling, Montieith, Strathern, and Fife. Secondly, in following the Road from East to West, are found the Marches of *England*, the Province of *Tweeddale*, in which is included the small Country of *Lauderdale*: Those of *Teviotdale*, and *Liddesdale*, which are Frontiers of *England*; then those of *Exdal* and *Eusdal*, which have no Cities, *Anandale*, *Nithesdale*, and *Galloway* on the Sea of *Ireland*. Lastly, round the Gulph of *Dumbrition*, are found the Counties of *Karrick*, *Kyle*, *Cunningham*, *Lenox*, and *Argyle*, in which are included the Countries of *Knapdal*, *Lorn*, and *Cantar*. The Isle of *Arran*, and that of *Bute*, which contain the Castle and Dutchy of *Rotsay*, which was once the Title of the eldest Son of the Kings of *Scotland*. Towards the Middle of all these Provinces is that of *Cledsdal*, in the Neighbourhood of the River *Cled*, from which it borrows its Name.

In the northern Part there are thirteen Counties, or Provinces, eight of which are found Eastward of the Lakes *Lancend* and *Ness*, viz. *Brod-albain*, *Athol*, *Perth*, (in which the small Countries of *Strathmund* and *Goure* are included) and the Province of *Angus*, which is on the Coast: These four Counties follow one another in this Order, according to the Course of the River *Tay*. Northward of them is found *Murray*, which includes the small Provinces of *Badzenoth*, and *Strathspey*, *Marr*, *Mernis*, and *Buchan*, to which I'll join the small Provinces of *Ainzey*, *Boene*, and *Strathbolgy*. The small Counties of *Gaeoth*, *Strathyle*, *Freendrachy*, *Balven*, *Strathdone*, and others, which have nothing remarkable. And at North by West of these 8 Provinces, are found the 5 others in the Order following; in going from South towards the North, *Locquabeir*, *Rosse*, which includes the small Country of *Aemanoch*, full of high Mountains, *Sutherland*, *Strathnavern*, and *Cathnes*.

Note, That besides the Isles heretofore mention'd, there are several others which are Dependencies of *Scotland*, viz. the *Hebrides*, which are Westward of it, and had antiently their particular King; and the *Orcades* which are Northward of it, and bear the Title of *County*: The Moderns reckon as far as 300 *Hebrides*, of which great Number, there are but 6 or 7 I mention in my particular Description inhabited. There are reckon'd 32 *Orcades*, 13 of which are inhabited; the greatest is *Mainland*, which may have 10 Leagues in Length, and 3 in Breadth. There are also the *Shetlandick* Isles, which are 30 or 40 in Number. The greatest are called *Shetland*, and *Mainland*, which some imagine to be the *Thule* of the Antients: It is situated under the 6 Degree of Latitude, and the 19 of Longitude; 20 Leagues long from South to North, and 5 or 6 Leagues broad.

The capital City of *Scotland* is *EDINBURGH*, near the Gulph of the same Name, in the County of *Lothian*. It is a very trading City, which has a strong Castle.

Note, That the *Scotch* are brave, generous, sober, very hospitable, and affable to Foreigners, and so very religious Observers of their Word, that even Thieves of that Nation keep it. Their Fidelity was so well known to the Kings of *France*, that *Charles VII.* chose them for the Guard of his Royal Person, in 1414. which his Successors have always observed, till of late; for though the first Troop of the King's Life-Guards, retains yet the Name of the *Scotch Troop*, there are few or no *Scotchmen* in it; because, perhaps, since the Reformation, few of the *Scotch* Nobility care to enter into the King of *France*'s Service, who admits of none but *Catholicks* near his sacred Person.

Note also, That the Government of *Scotland*, which before the Union under Queen *Anne* of glorious Memory, was like that of *England*, is since the Union the same with that of *England*, i. e. that the two Kingdoms of *England* and *Scotland*, make at present but a political One, called *Great-Britain*. The *Scotch* Nobility chuse among them a certain Number of Lords, who have their Seats in the Parliament of *Great-Britain*; and the *Scotch* Genry and Commonality do

the same for their Representatives in the House of Commons.

Note again, That *Lesley* says, that the Faith of *Jesus Christ*, was receiv'd in *Scotland* in the Year of Grace 203, under the Reign of *Donaldus V.* to whom Pope *Victor I.* sent Missionaries to preach the Gospel in his Kingdom, and that in less than ten Years, Idolatry was entirely extirpated. The Purity of the *Catholick* Religion was maintain'd in that Kingdom, ever since that Time, till the Reign of *James V.* during which the new Opinions were secretly introduced into it, by Means of *English* Ministers; after that King's Death, the Mind of *James VI.* his Grandson, yet an Infant, was easily turn'd that Way, who was instructed in the Doctrine, which is at present the prevailing one in *Scotland*, so that there remains in it but very few *Catholicks*.

A more particular Description, and Division of the Kingdom of *Scotland*, is as follows:

SOUTHERN PART.

The County of *LOTHIAN*, contains *Edinburgh*, *Leith*, *Litquo*, *Dunbar*, *Haddington*, *Aberborn*, *Seton*, *Bathwick*.

The County of *STERLING*, contains *Sterling*, *Callendar*, *Cumbernald*, *Elphinston*.

The County of *MONTEITH*, contains *Dumblain*, *Kirkbird*, *Kinkardin*.

The County of *STRATHERN*, contains *Abernethy*, *Tullibardin*, *Duphim*, *Invermeth*, *Drimen*.

The County of *FIFE*, contains *St. Andrew*, *Coupri*, *Falkland*, *Kinghorn*, *Kirkald*, *Lundoris*.

The *MARCHES*, contain *Coldingham*, *Douglas*, *Duns*, *Langton*.

The County of *TWEEDALE*, contains *Selkirk*, *Peblis*, *Lauderdale*, *Eclise*.

The County of *TEVIOTDALE*, contains *Tidbourg*, *Roxbourg*.

The County of *LIDISDALE*, contains *Harlay*, *Barkensfey*, *Exdal*.

The County of *ANANDALE*, contains *Anan*, *Longmaban*.

The County of *NITHISDALE*, contains *Dumfreis*, *Solway*, *Caelaverock*, *Morton*.

The County of *GALLOWAY*, contains *Withorn*, *Kirkou-bright*, *Wigton*, *Cardinesfort*.

The County of *KARRICK*, contains *Bargeny*, *Blagham*, *Carilarcy*.

The County of *KYLE*, contains *Aire*, *Wehille*.

The County of *CUNNINGHAM*, contains *Irwin*, *Largais*, *Kilmarnock*, *Eglington*.

The County of *LENOX*, contains *Dumbrition*.

The County of *ARGYLE*, contains *Encanel*, *Glenurghart*.

The County of *LORN*, contains *Dumstafag*, *Tarbar*, *Esl*, *Bergonam*.

The County of *CANTYR*, contains *Dunwert*, *Swin*, *Sandel*.

The Isle of *ARRAN*, contains *Arran*.

The Isle of *BUTE*, contains *Rotsay*.

The County of *CLIDESDALE*, contains *Glasgow*, *Hamilton*, *Bothwell*, *Reinsfraw*, *Palsay*, *Cruikston*.

NORTHERN PART.

The County of *BROD-ALBAIN*, contains *Inverlothca*.

The County of *ATHOL*, contains *Blair*.

The County of *PERTH*, contains *St. Johnstown*, *Dun-chelden*, *Arrol*.

The County of *ANGUS*, contains *Dundee*, *Brechin*, *Mont-Rose*, *Forfar*.

The County of *BUCHAN*, contains *Ugye*, *Bams*, *Rothemgen*, *Finlater*.

The County of *LOCHABAR*, contains *Quabeir*, *Kintail*.

The County of *ROSS*, contains *Chanonty*, *Lowet*, *Gromarty*, *Rosmarky*.

The County of *MURRAY*, contains *Elgin*, *Inverness*, *Rothies*, *Bean*, *Narden*.

The County of *MARRIS*, contains *Aberdeen*, *New-Aberdeen*.

The County of *MERNIS*, contains *Dunotyr*, *Forden*, *Coily*, *Bervy*.

The

The County of SUTHERLAND, contains *Dornoch, Dunrobin, Invereskyn.*

The County of STRATHNAVERN, contains *Glenick, Far, Laxford, Fors.*

The County of CAITHNESS, contains *Caitbues, Wick, Dunbeith.*

ISLES HEBRIDES.

Isle LEWIS, contains *Stornoway, Durna, St. Clement.*

Isle VIST, contains *St. Mary, St. Peter, St. Columban, Eskin.*

Isle SKIE, contains *Tranternes, Treford.*

Isle MULL, contains *Arrois, Dowart.*

Isle LEA, contains *Kilmory, Dunweg, Crume.*

Isle S. COLUMB, contains *Sodor.*

Isle JURA, contains the Isles *Ronan, Rum, Barray, Egg, Terrey, Collen, Sbent, Rona.*

ISLES ORCADE, OR ORKNEY.

The *Isle MAINLAND*, contains *Kirkewold*, the *Isle Hoyo*, the *Isle Sotrowassa*. — *Isle Schap*. *Isle Rosa*. — *Isle Pappa*. — *Isle Stromsa*.

ISLES SCHETLAND.

The *Isle SCHETLAND*, contains *Burgh*. — *Isle Zeal*. — *Isle Wasle*. — *Isle Fortlare*. — *Isle Linge*. — *Isle Orne*.

I R E L A N D.

This Isle was antiently named *Hibernia*, and *Little Britain*, or *Western Britain*, because situated Westward of the *Great*, from which it is separated by the Sea which bears its Name.

It extends from 51 Deg. 20 Min. of Latitude, to 55. 40; and from 9 $\frac{1}{2}$ of Longitude to the 14 $\frac{1}{2}$: So that it may have 110 *French* Leagues in Length, from South to North; 50 in Breadth, and 260 in Circuit; without reckoning those round its Gulphs, and its Lakes, which are towards the Coasts.

The Climate of *Ireland* is sometimes temperate, and is never excessively cold, nor excessively hot, the Sun having never much Power there, because of the Humidity of the Air, and of the frequent Rains and Fogs: That Air, though coarse, causes no Maladies to the Natives; who are seldom ill but for Death, and seldom eight Days successively, since they dye commonly of old Age, so that there is no Medium between a perfect Health and Death.

Its marshy Soil, interspersed with Lakes, Mountains, and Forests, is not very proper for Corn, which grows lean, and never comes to a true Maturity. It produces no Wine, but the Herbs are delicious for the Cattle; it produces a great Quantity of Saffron; its Mountains and Meadows are cover'd with Sheep and Oxen; its Forests full of Deer, and formerly of wild Boars, Wolves, &c. which were in their Species much smaller than those of *England*; Birds of Prey are found in it, especially true Falcons; it abounds with Bees, which are so common, that the hollow Trees are sometimes full of them; but the most singular Thing is, that it breeds no venomous Beasts of any Kind whatever.

Most of its Rivers are full of excellent Fish; particularly Salmons, Trouts, &c. the most remarkable of them are the *Shannon*, which forms four Lakes in its Course, and a Gulph pretty large at its Mouth; the *Sewer*, which passes at *Cashel*; the *Broodwater*, at *Lismore*, in *Munster*; the *Barrow*, at *Caterlough*, in *Leinster*; the *Boyne*, at *Trim* in *Meath*; the River and Lake *Earn*, and *Ean*, which comes out of the Lake *Eaug* in *Ulster*; and several other Lakes less than these. In the Part which looks towards the South by West, are found the Gulphs of *Bentro*, *Baltimore*, and of *Dingle*, which are very considerable for the Fishery of Cod.

This Kingdom is divided into five Provinces, which have antiently bore the Title of Kingdoms; and are in the following Situation: First, *Leinster* is Eastward, *Ulster* Northward, *Connaught* Westward, *Munster* Southward, and *Meath* in the Middle drawing Eastward.

LEINSTER, contains seven Counties, viz. *Dublin*, *Catherlough*, and *Wexford*, which are situated towards the Coast; *Kilkenny*, *Queen's County*, and *King's County*, which are Eastward; and *Kildare* in the Middle.

ULSTER, is the greatest Province of *Ireland*, and contains ten Counties, found in the following Order, be-

ginning at South by East, and turning round the Coast: First *Louth*, *Down*, *Antrim*, *Colerain*, *Tyrconnel*, with the *Isle Derry*, or *In-owen*: Returning toward the Middle, in the Neighbourhood of the Lake *Earn*, the County of *Fermanagh*, then *Cavan*, *Monaghan*, *Armagh*, and *Trim*: In this Province are found the Lakes *Earn*, and *Eaugh*, in which there are several Isles; the first is thirteen or fourteen Leagues long, and six broad; the second is ten Leagues long, and seven broad. In a small Island, situated towards the Middle of a Lake made by the *Liffer*, is placed the Hole of *St. Patrick*; the Wonders thereof Children are entertained with by old Women.

CONNAUGHT, contains six Counties, which are found in this Order; beginning Northward, and descending along the Coasts, first *Slego*, *Mayo*, *Galloway*, *Clare*; then going back, *Roscommon*, and *Letrim*; there are six great Lakes in this Province, and a pretty considerable Gulph.

MUNSTER, contains six Counties, found in the following Order, going from South to North by East, viz. *Desmond*, *Cork*, and *Waterford*, situated along the Coast, are opposite the Point of *Cornwall*; *Kerry*, *Limerick*, and *Tipperary*, situated between these and the River *Shannon*.

Though **MEATH** be but a very little Province, it is divided into Eastern and Western, call'd *East-Meath*, and *West-Meath*; the last is subdivided into *West-Meath*, and the County of *Longford*, which some have placed in *Connaught*.

The Capital of *Ireland* is **DUBLIN**, situated on the Eastern Coast of the Island, in the Province of *Leinster* Southward, and near the River *Liffe*. The Viceroy, or Lord-Lieutenant, keeps his Court there; and it is the Seat of the Parliament.

Note, That the *Irish* are most of them handsome, well-made, strong, extremely brave, ingenious, and very courteous to Foreigners, whom they receive with all the good Manners imaginable: They are extreme in their Passions, either entirely good, or quite bad: The Nobility love Hunting and Musick, and can rival all the Nations of *Europe* for Politeness, Generosity and good Manners: The Vulgar are accused of Laziness, and of being inclined to other Vices, which I pass by under Silence, because I know nothing of it but by Report, which is a very partial Historian.

Note, also, That the Laws of *England* are observ'd in *Ireland*, where the King sends his Viceroy, to whom he gives full Power, as of creating and deposing Magistrates, of punishing or forgiving Crimes, except those of High Treason: The Viceroy convokes also the Parliament, according to the Orders he receives from the King of *England*.

Note again, That before the Reformation, *Ireland* was called by the *Christian* World, the *Nursery of Saints*, because the *Catholic* Religion was professed there in all its Purity; but as the reform'd Religion, which is at present the reigning one in *Ireland*, dislodg'd all those Saints from Heaven, there is no farther Need of such a Nursery.

Here follows a more particular Description of *Ireland*:

LEINSTER.

The County of **DUBLIN**, contains *Dublin*, *Glandelough*, *Newcastle*, *Wicklow*.

The County of **CATERLAGH**, contains *Caterlagh*, *Lagblin*, *Arkloe*, *Fulo*.

The County of **WEXFORD**, contains *Wexford*, *Fernes*, *Rofs*.

The County of **KILKENNY**, contains *Kilkenny*, *Thomastown*, *Justog*.

The **QUEEN'S-COUNTY**, contains *Queen's-Town*.

The **KING'S-COUNTY**, contains *King's-Town*.

The County of **KILDARE**, contains *Kildare*, *Carbre*, *Naash*.

ULSTER.

The County of **LOUTH**, contains *Dordrach*, *Dundalke*.

The County of **DOWN**, contains *Down*, *Newry*.

The County of **ANTRIM**, contains *Antrim*, *Knockerynus*.

The

The County of COLERAIN, contains *Colerain*.
 The County of TYRCONNEL, contains *Dongall*.
 The County of FERMANAGH, contains *Beltershert*.
 The County of CAVAN, contains *Cavan*, *Kilmore*.
 The County of MONAGHAM, contains *Monaghnam*.
 The County of ARMAGH, contains *Armagh*, *Mont-Norris*.
 The County of TIROEN, contains *Dunganon*, *Strabane*.

CONNAUGHT.

The County of SLEGO, contains *Slego*.
 The County of MAYO, contains *Mayo*, *Moore*.
 The County of GALLOWAY, contains *Galloway*, *Agerro*.
 The County of CLARE, contains *Clare*, *Tuman*, *Killinerah*, *Kellaloe*.
 The County of ROSCOMMON, contains *Roscommon*, *Athlon*, *Balintubar*, *Boile*.
 The County of LETRIM, contains *Letrim*, *Athony*.

MUNSTER.

The County of DESMOND, contains *Doneboy*, *Donekine*.
 The County of CORK, contains *Cork*, *Youghall*, *Kinsale*.
 The County of WATERFORD, contains *Waterford*, *Dungarvan*, *Lismore*, *Kerry*, *Dingle*, *Ardart*.
 The County of LIMERICK, contains *Limerick*, *Kilmallock*.
 The County of TIPPERARY, contains *Emely*, *Holycross*, *Cashell*.

MEATH.

The County of WESTMEATH, contains *Molingur*.
 The County of LONGFORD, contains *Longford*, *Ardragh*.
 The County of EASTMEATH, contains *Trim*, *Aboy*, *Narant*, *Killes*.

SPAIN.

This Kingdom which is the most western of *Europe*, was once, for that Reason, called *Hesperia* by the *Greeks*. The *Romans* called it *Iberia*, from the *Ebre* one of its Rivers. The *Chaldeans*, and several others, gave it that of *Spania*, i. e. *Scarce*, because it was not well inhabited.

It extends from the 9 Degree of Longitude, to the 24; and from the 36 of Latitude, to about the 44; so that it may have in Length 220 great *French* Leagues, from Cape *Finister* in *Galicia*, to that of *Crecus* in *Catalonia*; and 170 in Breadth, from the Streights of *Gibraltar*, to the Cape of *Las Pennas* in *Asturia*. Its greatest Length from South by West, to North by East, contains 260 Leagues from Cape *St. Vincent* in *Algarve*, to *Collioure* in *Catalonia*.

It confines Eastward with the *Mediterranean*; Southward with the same Sea, and the Streights of *Gibraltar*; Westward with the Ocean; and Northward with the same Ocean, and the *Pyrenean* Mountains.

Its Climate is generally good and wholesome, but a little hot, which renders the Soil dry, and very improper to bear good Corn; but if it does not produce Abundance of Corn, it is extremely fertile in delicious Wines and Fruits. It has several Mines of Silver, Iron, Copper, Cinnabar, and some of Gold. It abounds in Cattle, especially Sheep, whose Wool, mix'd with that of *England*, makes the best Cloth in the World; and in Horses very much esteem'd.

The most remarkable of its Rivers is the *Ebre*, whose Source is in the Mountains of *Old Castille*, near *Asturia*. It passes in a Corner of *Navarre*, runs through *Arragon*, and its capital City, then after it has passed thro' *Tortosa* in *Catalonia*, disembogues into the *Mediterranean* Sea. The *Quadalquivir*, (i. e. in *Moorish* Language, *Great River*) which passing at *Cordoua*, and *Seville*, traverses all *Andalusia*. The *Guadiana*, which traverses almost all *New Castille*, Part of *Portugal*, and separates the small Kingdom of *Algarve* from *Andalusia*. The *Tagus*, which passing thro' *Toledo*, traverses all *New Castille* and *Portugal*. Lastly, the *Minho*, which is less than all the others, and traverses *Galicia* from North to

South by West: These five last Rivers have their Course from East to West, and disembogue into the Ocean. The *Guadiana* hides itself four or five Leagues under Ground, between its Source and *Calatrava* in *New Castille*.

SPAIN, is divided into 15 principal Parts, which have almost all bore the Title of Kingdom. The *New* and *Old Castille*, with *Leon*, are in the Middle of the Country. *Gallicia*, *Asturia*, and *Biscay*, are found on the Coast of the Ocean, Northward, going from West, Eastward. *Navarre*, *Arragon*, and *Catalonia*, are found in this Order, along the *Pyrenean* Mountains, going from North to South by East. Then following the Coast of the *Mediterranean* from *Catalonia*, which takes up more than 80 Leagues of it, to beyond the Streight, are found *Valencia*, the little Kingdom of *Murcia*, *Grenada*, and *Andalusia*, situated on the Ocean, and in the Neighbourhood of the *Quadalquivir*, occupying the Coasts of the Streight, and 6 or 7 Leagues on the *Mediterranean* Sea. Lastly, Westward is seen on the Coasts of the Ocean, the Kingdom of *Portugal*, of which I'll give a particular Description.

Ever since the Kings of *Spain* have fix'd their Court at *MADRID*, that City has acquired a very great Reputation, and is esteemed at present, the principal of *Spain*, having ravish'd the Name of Capital from *Toledo*.

MADRID, is in the *New Castille*, situated on the little River *Manzavares*, and has nothing considerable but the King's Palace, the Church of our Lady, and some others, besides this it is large, and very dirty.

It must be observed that a great Difference is made in *Spain*, between Cities and Towns; for there are no Cities but Archbishopricks and Bishopricks, except a few, which by a special Favour, bear the Name of Cities, tho' they have no Bishop, and which I'll mark in my particular Description, with *. Each City has several Towns in its Jurisdiction, and Corregidores in its Government, which Towns have not.

Note, That the *Spaniards* are accused of being very proud and lazy, but very patient in Trouble, and Adversity; sober in their eating, tedious in taking a Resolution, but very obstinate in pursuing their Designs, and in opposing the Efforts of their Enemies; and in fact they are very good Soldiers, when led to the Field by a General of Reputation, of which History furnishes us with an infinite Number of Examples. The *Spanish* Infantry is very much esteemed in the Field, but it is never very numerous, and there has never been seen an Army of 8000 native *Spaniards*, because the *Spanish* Women are not very fecund. They are very circumspect, mysterious, and secret, and love honourable Titles. They are grave, and very serious, and their Politicks surpass those of all the Courts of *Europe*.

Note also, That this Kingdom has been for several Centuries, in Prey to *Barbarian* Nations, whose Names, and the Diversity of their Government, would be too tedious to particularize here; at present it is possessed by a King, who has large Dominions in the two Hemispheres: For he possesses yet in *Europe* the whole *Spanish* Monarchy; and the greatest and richest Part of *America*; *Oran* on the Coast of *Africa*; the *Isles Canaries*, Westward of *Bildulgerid*, &c.

Note, again, That none but the Catholick Religion is professed throughout the whole *Spanish* Dominions, either in *Europe*, *America*, *Africa*, or *Asia*: That the *Moors* were entirely expell'd from *Spain*, in 1610, to the Number of 600,000; according to others 900,000; who refused to receive Baptism.

Here follows a more particular Description and Division of the Kingdom of *Spain*.

The Province of *NEW-CASTILLE*, contains *Madrid**, *Toledo*, Arch. *Alcala* of *Hen**, *Siguença*, Bishop. *Calatrava*, *Huesca*, D. *Consuega*, *Cuença*, Bishop.

The Province of *ESTRAMADURA*, contains *Badajoz*, Bishop.

Bishop. *Alcantara*, *Merida*, *Albukerque*, D.

The Province of OLD CASTILLE, contains *Burgos*, Arch. *Valladolid*, Bishop. *Frias*, D. *Calaborra*, Bishop. *Lerma*, D. *Soria*, *. *Ojma*, Bishop. *Segovia*, Bishop. *Avila*, Bishop. *Placentia*, Bishop. *Coria*, Bishop.

The Kingdom of LEON, contains *Leon*, Bishop. *Astorga*, Bishop. *Palencia*, Bishop. *Benavente*, *Camora*, *Toro*, Bishop. *Tordesillas*, *Medina del Campo*, *Salamanca*, Bishop. *Alva*, *Ciudad-Rodigo*, Bishop.

The Kingdom of GALICIA, contains *Compostella*, Arch. *Lugo*, Bishop. *Mondonedo*, Bishop. *Ferreol*, *Corunna*, Bishop. *Bayona*, Bishop. *Morgia*, *Finisterre*, *El Padron*, *Tuy*, Bishop. *Riba d'Avia*, *Oronte*, Bishop. *Montrey*, *Viana*.

The Kingdom of ASTURIAS, contains *Oviedo*, Bishop. *Villa-Viciosa*, *Aviles*, Bishop. *Benavente*, *Riba de Silla*, *Santillana*, Bishop. *St. André*, *Llanes*.

The Province of BISCAY, contains *Bilboa*, *Durango*, *Vermeo*, *Laredo*, *Vittoria*, *Salvatierra*, *Tolosa*, *St. Sebastian*, *Fontarabia*, *Placentia*.

The Kingdom of NAVARRE, contains *Pampelona*, Bishop. *Estella*, *Tadela*, *Olitte*, *Sanguesse*, *Lerin*, County.

The Kingdom of ARRAGON, contains *Saragossa*, Arch. *Taracone*, Bishop. *Huesca*, Bishop. *Jacca*, Bishop. *Venasque*, *Balbastro*, Bishop. *Calatajub*, *Ixar*, Dutchy. *Albarazin*, Bishop. *Tervel*, Bishop.

The Province of CATALONIA, contains *Barcelona*, Bishop. *Tarragone*, Arch. *Tortosa*, Bishop. *Lerida*, Bishop. *Solsona*, Bishop. *Cardone*, Dutchy. *Vich*, Bishop. *Girone*, Bishop. *La Seu d'Urgel*, *. *Puycerda*.

The County of ROUSSILLON, contains *Perpignan*, Bishop. *Colliere*, *Salses*, *Elna*, Bishop.

The Kingdom of VALENCE, contains *Valence*, Arch. *Segorbe*, Bishop. *Villa Hermosa*, *St. Matheo*, *Benicarlo*, *Morvedro*, *Alzira*, *Xativa*, Bishop. *Biar*, *Montesa*, *Alicant*, *Elche*, *Orivellon*, Bishop.

The Kingdom of GRENADE, contains *Grenade*, Arch. *Guadia*, *Almeria*, Bishop. *Albama*, *. *Adra*, *Salobrenna*, *Loxa*, *. *Malaga*, Bishop. *Ronda*, *. *Antequera*, *Baca*, *. *Santa fe*, *.

The Kingdom of MARCIA, contains *Marcia*, Bishop. *Cartagena*, Bishop. *Almacaren*, *Lorca*, *Caravaca*.

The Island of MAJORCA, contains *Majorca*, Bishop. *Aleudia*, *Solari*.

The Isle of MINORCA, belonging at present to England, contains *Citadella*, *Port-Mahon*.

The Isle of IVICA, contains *Ivica*, only.

The Kingdom of ANDALUSIA, contain *Seville*, Arch. *St. Lucar*, *Xeres de la Frontera*, *Cadiz*, Bishop. *Medina Sidonia*, *Eciia*, *. *Cordua*, Bishop. *Montemajor*, *Anduxar*, *. *Jaen*, Bishop. *Bacsa*, *. *Gibraltar*, *. belonging at present to England.

P O R T U G A L.

This Kingdom which includes all the antient *Lusitania*, the Country of the *Bracares*, and some other antient People, is situated on the western Coast of *Spain*, of which it made once a Part.

It extends from the 36 Deg. 30 Min. of Latitude, to the 42, between the 9 and 13 of Longitude; so that it has in its greatest Length from South to North 110 great French Leagues, 50 in its greatest Breadth, and 135 of Coasts.

It confines Northward with *Galicia*; Eastward with the Kingdom of *Leon*, the two *Castilles*, and *Andalusia*; Southward and Westward with the Ocean.

The Climate is mild, wholesome, and temperate: The Soil is generally hilly, and produces a great Quantity of Wine, delicious Fruits, viz. Oranges, Lemons, Almonds, Olives, &c. It feeds a great Number of Silk-Worms, and Bees, which prove very beneficial to the Kingdom, there are also found Mines of Gold, Silver, Lead, Iron, Tin, and Allum: Crystal, Species of Rubies, Emeralds, and Hyacinths, and Quarries of beautiful Marble. The most sterile Places, as the Mountains, Downs, &c. are covered with very fat Cattle, as Oxen, Sheep, Goats, and Hogs; there is found in it a great Number of Partridges, and Hares. The Horses

of *Portugal* are so swift, that the Antients have imagin'd the Mares conceived from the Wind. Abundance of Salt is made on the Coasts, and the Rivers are full of excellent Fish.

The *Tagus*, the *Guadiana*, the *Douro*, the *Minho*, the *Lima*, the *Mondago*, the *Cadavo*, and several other Rivers, bathe *Portugal* with their Waters, and render it, in Proportion, much more fertile than *Spain*. The most famous Ports are those of *Lisbon* and of *Oporto*.

The Kingdom is divided into six Parts; which are the *Estramadura*, *Beira*, *Tralofmontes*, between *Douro* and *Minho*, *Aletenjo*, and the little Kingdom of *Algarves*. The two first are found in the Middle, one Southward the other Northward; the two following are Northward, one Eastward the other Westward; the two last are Southward, so that the *Aletenjo* is between *Estramadura*, and the little Kingdom of *Algarves*, which is the most Southward of all.

The Capital is *Lisbon*, on the *Tagus*, towards its Mouth in the Ocean. It passes for one of the fairest, most trading, and best inhabited Cities of *Europe*. It is honoured with an Archiepiscopal See, who styles himself Patriarch of *Portugal*, and of the *Indies*.

Note, That the *Portuguese* are extremely well affected to their King, whom they esteem above all the Monarchs of the World. They are accused of an insupportable Pride, of a ridiculous Presumption of their own Merit, and of an incredible Scorn for all other Nations. They are very sober in their Manner of Living, decent in their Cloaths, and extremely parsimonious in their Expences; tho' the Nobility are very liberal and magnificent, they are enterprising, courageous, and excellent and experienced Soldiers, at Sea, witness the great Conquests they have made in foreign Parts. They were once more powerful in the *Indies* than they are at present, but the *Dutch* have render'd themselves Masters of the best Places in those Parts, as *Malucca*, *Cochin*, *Negapatan*, &c.

Note also, That since the Death of the King *Don Sebastian*, who was killed, or lost in *Africa*, in 1578, there were several Pretenders to the Throne. *Henry*, Cardinal and great Uncle of that unfortunate King, was crown'd in an extreme old Age, and died in 1580. *Anthony*, Prior of *Crato*, was declared King by the States of the Kingdom; but sometime afterwards, that is to say, in the Year 1590. *Philip II.* King of *Spain* having expelled him from *Portugal*, usurped the Kingdom from the Dukes of *Bragance*, who were legitimate Heirs. His Successors possessed it till the Year 1640, in which the *Portuguese*, fatigued with the *Spanish* Government, shook off the Yoke, and obliged *John VI.* Duke of *Bragance*, to accept the Crown of *Portugal*, whom they declar'd King, and maintain'd so well in that august Dignity, that all the Efforts of *Philip IV.* King of *Spain*, to re-unite that Kingdom to his Dominions, proved vain. It may be said with very just Reason, that the God of the Armies, maintain'd on that Occasion, the Cause of the Righteous, with the *French* Arms, which came to the Succour of his *Portuguese* Majesty; since it was impossible so small a Number of Men could have resisted all the Force of *Spain*, if the Almighty had not stood on their Side.

The King of *Portugal* is powerful by Sea and Land, because he possesses several large foreign Territories, as the *Brasil* in *America*, the Isles of *Cape-Verd*, of *Madeira*, and of the *Azores* in the *Atlantick* Ocean, several Forts and Fortresses in *Africa*; in *Asia* he is Master of *Goa*, *Diu*, *Daman*, *Macao*, &c.

Note besides, That the Catholick Religion is professed in all its Purity, in the Kingdom of *Portugal*. The new Christians, i. e. those who are of *Jewish* Extraction, cannot possess any Employment in the Judicature, but by a special Favour from the King, or for some signal Services rendered to the State.

A more particular Description of the Kingdom of *Portugal*, is as follows.

The Province of *ESTRAMADURA*, contains *Lisbon*, Arch.

Arch. *Almada, Setuval, Camora, Alanguer, Santaren, Tanar, Torres novas, Dutchy. Leira, Bishop. Abrantes, Affarcellas, Penela.*

The Province of TRALOSMONTES, contains *Braganza**, D. *Miranda*, Bish. *Castle-Rodrigo, Villa-Real*, D. *Chaves, Cunha, Montalegre.*

Between the DOURO and MINHO, are *Braga*, Arch. *Porto*, Bishop. *Viana, Caminha.*

The Province of BEIRA, contains *Coimbre*, Bishop. *Aveira*, D. *Afeira, Lamego*, Bishop. *Viscu*, Bishop. *Guarda*, Bishop. *Salvaterra, Castel-Branco, Monsanto, Linhares, Sabugal, Mello.*

The Province of ALENTEJO, contains *Evora*, Arch. *Elvas*, Bishop. *Portalegre*, Bishop. *Villa-Vitiosa, Beja*, D. *Oliveira**.

The Kingdom of ALGARVES, contains *Silves**, *Lagos, Faro*, Bishop. *Tavila, Sagres.*

I T A L Y.

This Part of Europe was once call'd *Saturnia*, from the Name of its Kings; *Aufonia, Cenotria*, and *Hesperia*, from those of three Princes, or Captains who brought Colonies into it. The Origin of that it bears at present, is very uncertain; for some Authors say, that it comes from a certain King *Italus*; and others pretend, that it has been given to it, because of the Oxen it fed once in Abundance, and which the antient Greeks call'd *Itali*.

Its greatest Longitude is from the *Lauset*, in the Principality of *Barcelonetta*, under the 28 Degree, as far as *Otrante*, about the 42 Deg. 30 Min. and its greatest Latitude from the Cape *Arms* in *Calabria*, under 37 Deg. 30 Min. to the Source of *Piave* in the *Frioul*, under the 46 Deg. 30 Min. so that its greatest Length from the *Col Major*, towards the Frontiers of *Savoy*, drawing towards South by East, as far as Cape *Delle Colonne*, in the ulterior *Calabria*, contains 240 Leagues: As for its Breadth it is so very irregular that I'll say nothing of it.

It advances, towards the South by East as a Peninsula, in the Form of a Boot, into the *Mediterranean*, which receives various Names according to the different Coasts it bathes. Northward it is called the *Adriatick Sea*, or *Gulph of Venice*; South by West, the *Tyrrhenian Sea*, or of *Tuscany*; and that Part which bathes the Sole of the Boot, *Ionian Sea*. These are its Bounds Northward and Southward: Northward it confines with the *Alps*, which part it from the Territories depending on the House of *Austria* in *Germany*, and from *Switzerland*: Westward with the same Mountains, and the River *Vare*, which divide it from *France* and *Savoy*.

The Climate is generally wholesome and temperate, except in the Ecclesiastical State, where the Air is very coarse and unwholesome; its Soil, which is watered with a great Number of Rivers, furnishes Corn, excellent Wines, beautiful Fruits, as Oranges, Citrons, Lemons, Olives, &c. and excellent Oil. The Kingdom of *Naples*, is fertile in Sugar, Cotton, Almonds, &c. it has a vast Number of Mulberry-Trees, whose Leaves feed a prodigious Quantity of Silk-Worms: There are found in it large and agreeable Meadows, covered with all Sorts of Cattle, and vast Forests, almost always green, and wild Beasts, and Game. Its Mountains have Mines of several Metals, and it abounds with Quarries of beautiful Marble. Therefore *Italy* is called the Garden of Europe.

Its principal Rivers are the *Po*, which takes its Source from *Mont Viso* in *Piedmont*, which it traverses with the Dutchies of *Monferrat*, and *Milan*, which it parts from that of *Parma*; it runs likewise through the Dutchies of *Mantua*, and *Ferrara*: Passing through the Cities of *Turin, Trin, Casal, Valencia, Placentia, Cremona*, and *Ferrara*, then disembogues into the Gulph of *Venice*, through several Mouths. The *Adige*, whose Source is in the County of *Tirol*, and which runs through the Bishoprick and City of *Trent*, the State of *Venice* in passing at *Verona*, and *Roitige*, which it separates from the *Padouan*. The *Adige* which comes from the County of *Chiavente*, passes in the Lake *Cano*, through *Lody*, and disembogues into the *Po*, between *Cremona*, and *Placentia*. The *Tesin*, whose Source in the *Mont St. Gotthard*,

in the Canton of *Uri*, which passes into the Lake *Major*, at *Pavia*, then disembogues likewise into the *Pa*. The *Arno*, which traverses *Tuscany*, passes through the Cities of *Florence* and *Pisa*, then throws itself into the Sea. The *Tyber* which passes at *Rome*, &c.

Besides the Lakes above-mentioned, are those of *Garda* and *Isseo*, in the State of *Venice*. The Lake of *Celano*, in the ulterior *Abruzzo*: Those of *Andori*, of *Varan*, and of *Lesina*, in the *Capitanate*: That of *Perusia*, antiently *Trasimene*, famous for the Defeat of the Romans by *Hannibal*; and that of *Bossana*, in *St. Peter's Patrimony*.

I have already observed that *Italy* has the Figure of a Boot, which seems to push *Sicily* into the Sea with the End of the Foot: That Form will serve us to divide it into three Parts; the first forms the big Part of the Leg, and contains the Ecclesiastical State, and *Tuscany* which makes the Knee; the second, which makes the lower Part of the Leg, and the Foot, contains the Kingdom of *Naples*; and the third, which forms the Top of the Boot, contains the antient *Lombardy*.

ROME, is the Capital of *Italy*; it is situated on the *Tyber*, in a little Province of the Ecclesiastical State, call'd *Campania di Roma*: This City has been accounted for 2000 Years the most famous of the World; but whatever Effort has been made, to preserve to it some Remains of its antient Splendor, it is not at present what it was antiently. It is in vain to search *Rome* in *Rome*, for it can be found there no more; and if it was once to be deserted by the Popes, who keep their Court there, *Rome* would soon have a Fate semblable to that of its Empire.

Note, That the *Italians* are ingenious, prudent, polite, eloquent, courteous, and promise always four Times more than they design to perform. They are accused of Dissimulation, Poltroonery, Laziness, and Jealousy, even to Extravagancy. For my Part, tho' I have lived among them for very near two Years, I have seen no Signs of those Vices laid to their Charge; it is true, that I have had no Intrigues with the Wives, nor Quarrels with the Husbands, who have always treated me in a genteel and polite Manner. *Italy* however, has produced several great Captains, as *Andrew Doria* at Sea, the Duke of *Parma*, the Count *Montecuculi*, in the last Century, and several others.

Note also, That *Italy* was governed from the Foundation of *Rome*, during the Space of 245 Years by Kings, *Tarquinus the Proud* having been the last of them. He had rendered, by his insupportable Pride, the Name of King, so odious to the *Roman* People, that they hated him even in his Allies. There was formed afterwards, that famous Republick, which acquired an immortal Glory, by her Victories, Politicks, and the eminent Virtues of her Consuls and Senators. It lasted till *Julius Caesar*, proclaimed Emperor in 706, he extended his Empire in the three Parts of the known World, and rendered Tributaries, the most powerful Sovereigns; but that Empire being arrived to the highest Pitch of its Period, declined by degrees thro' the Inaction and Cowardice of its Emperors. At last, to give us a memorable Example of the precarious State of the Grandeur of this World, God permitted, to humble the *Roman* Pride, that it should fall into a Decline, and be dismembered under the Reign of *Honorius*, who died in the Year of Grace 423; that's to say, the 1176th of the Foundation of *Rome*.

Italy came afterwards in the Power of the Emperors of *Constantinople*, who used to send Viceroys, or Governors into it, to maintain their Interests and Authority. Those Governors were called *Exarchs*, and resided at *Ravenna*, for long before that Time, the Popes had already their Seat at *Rome*. The first of those *Exarchs* was *Longinus*, who came to *Ravenna* in 568, sent by *Justinus the Younger*. But that *Exarchate* lasted but 184 Years; and *Astolphus*, King of the *Lombards*, took that City in 752, and expelled *Eutyches*, who was the last *Exarch*. *Italy* was afterwards divided between the Eastern and Western Emperors.

All the Princes who have Territories in *Italy*, govern their Dominions each according to his own Politick,

tick, and Will: I'll say something of it in the particular Discourse of each of those States.

Note, again, That the *Catholic* Religion is almost the only one profess'd in *Italy*.

ECCLESIASTICAL STATE.

This *State* is the whole Extent of the Territories which depend of the Holy See. The Air, as I have already observed, is very coarse and unwholesome towards *Rome*, because of the Marshes, and the Humidity of the Soil; which notwithstanding is fertile enough in Corn, Wines, Fruits, and Pasture.

It is divided into twelve small Provinces, which are the *Campania di Roma*, *St. Peter's Patrimony*, the *Dutchy of Castro*, the *Ombria*, the *Territory of Sabine*, the *Dutchy of Urbino*, the *Marche of Ancona*, and the *Romagna*, which contains the *Ferrarese* and *Boulonese*: The three first are on the Sea of *Tuscany*, and the four which follow them on the Gulph of *Venice*. The Pope, who styles himself Chief of the *Catholic*, *Apostolical*, and *Roman* Church, is the first Sovereign of *Italy*; that State call'd *Ecclesiastical State*, depends of him, and the Governors of the Provinces and Cities are sent by his Holiness. The Holy Father ordinarily resides, and keeps his Pontifical See in *Rome*, Capital of his Dominions, and of all *Italy*. The Bishopricks are so numerous in the *Ecclesiastical State*, that I cannot but put the greatest Part of them in my particular Description of it.

TUSCANY.

TUSCANY, has been a Kingdom, which the Antients call'd *Hebruria*, *Tuscia*, and the Greeks *Thyrrenia*.

It includes the *Florentine*, the *Pisan*, and the *Siennois*, which were heretofore all three governed in Form of a Republick, before *Cosmo* of *Medicis* made first Duke of it by the Emperor *Charles V.* he was call'd *Grand Duke of Tuscany*; and his Successors have always preserved the same Title: They reside at *Florence*, Capital of their Dominions.

This City is situated on the *Arno*, and is esteemed one of the fairest of *Italy*; it is an Archiepiscopal See; and the *Italians* call it *Fiorenza la Bella*. *Pisa*, and *Sienna*, Capitals of their Countries, preserve still a Shadow of Aristocracy in their Government.

A more particular Description of the *Ecclesiastical State* is as follows:

The *CAMPANIA DI ROMA*, contains *Rome*, *Tivoli*, *Frascati*, *Ostia*, *Palestrina*, *Anagni*, *Signi*, *Veletri*, *Terracina*.

ST. PETER'S PATRIMONY, contains *Viterbo*, *Monte-Fiascone*, *Orta*, *Nepi*, *Sutri*, *Bracciano*, *D. Civetta-Vecchia*.

The *Dutchy of CASTRO*, contains *Castro*, *Farnese*, *Rareiglione*, *Pitigliano*.

The Province of *ORVIETO*, contains *Orvieto*, *Aquapendente*, *Onano*, *D.*

The *PERUGINO*, contains *Perusa*, *Fratta*.

The Province of *UMBRIA*, contains *Spoletto*, *D. Fuligno*, *Noura*, *Affisi*, *Todi*, *Amelia*, *Terni*, *Rieti*.

The Territory of *SABINA*, contains *Narni*, *Otricoli*, *Magliano*, *Vicovaro*.

The *Marche of ANCONA*, contains *Ancona*, *Recanati*, *Loretto*, *Osimo*, *Jesi*, *S. Severino*, *Telentino*, *Macerata*, *Ascoli*.

The *Dutchy of URBINO*, contains *Urbino*, *Pesaro*, *Fossombrone*, *Sinigaglia*, *Cagli*, *St. Leo*, *St. Marino*, *Repub.*

The *ROMAGNA*, contains *Ravenna*, *Faenza*, *Imola*, *Forli*, *Cesna*, *Rimini*, *Sarsina*.

The *FERRARESE*, contains *Ferrara*, *D. Commachio*, *Cento*, *Lagocento*, *Buondeno*.

The *BOLONESE*, contains *Bologna*, *Repub.* *Bentivoglio*, *Vergato*, *St. Pietro*.

TUSCANY.

The *FLORENTIN*, contains *Florence*, *Arch.* *Pistoia*, *Prato*, *Scarpaja*, *S. Sepolchro*, *Arezzo*, *Cortona*, *Empoli*, *Pontremoli*.

The *PISAN*, contains *Pisa*, *Arch.* *Livorno*, *Campiglia*, *Volterra*.

The *SIENNOIS*, contains *Sienna*, *Arch.* *Pienza*, *Mont-*

Alcino, *Piumbino*, *Principality.* *Orbitello*, *Princip.* *Porto-Hercole*, *Grosseto*, *Massa*.

The Island of *ELBE*, contains *Porto-Longone*, *Porto-Feraio*.

NAPLES.

This Kingdom, antiently called *Sicily*, this Side the *Var*, passes for the most agreeable and delightful, not of *Italy* only, but even of all *Europe*.

The Climate is always mild and temperate; the Soil abounds in all that can be desired, and the Country enjoys a perpetual Spring.

It is divided into twelve small Provinces, which are the *Terra di Lavauro*; the *ulterior*, and *citerior Abruzzo*; the County of *Molisa*; the *Capitanate*, the *ulterior*, and *citerior Principality*; the *Basilicate*, the Land of *Bari*; the Land of *Otranto*, and the *citerior* and *ulterior Calabria*: The first seven, form the lower Part of the Leg of the Boot, and the five others make up the Foot.

The Kingdom of *Naples* fell in the Power of the Emperors of the East, after the Decay of the *Roman* Empire, it was desolated by *Alarick* King of the *Goths*, *Genferic* King of the *Vandals*, and *Odoane* King of the *Herules*; *Theodoric*, and *Totila*, Kings of the same *Goths*, rendered themselves entirely Masters of it, in Spite of all the Efforts of the *Greeks*. Afterwards *Narses*, General of the Emperor *Justinian*, having defeated *Tejas*, also King of the *Goths*, re-conquered all *Italy*. The *Lombards* possessed it, at least the greatest Part of it, more than 200 Years. *Pepin*, *Charlemagne's* Son, defeated them, and took from them all they possessed of that Kingdom; afterwards it was divided between that Emperor, *Nicephor*, Emperor of the East, and *Grimald* of *Benevento*, born a *Lombard*. The *Romans*, the *Greeks*, and the Duke endeavoured to preserve each his Part. But at last the *Normans* usurped the whole Kingdom. The *Suabes*, the *French*, the *Aragonois*, and the *Spaniards*, have governed it every one of them by Turns, and always held it from the Pope as a Fief of the Church; and the King of *Naples* pays every Year to the holy See, for Acknowledgment of the Homage 6000 Ducats, and a *white Haukeney*, which his Ambassador at *Rome* caused to be conducted with great Magnificence, when he goes to present it to his Holiness. It must be observed that this Homage is made for *Naples* and *Sicily*, and that those who possessed the two Kingdoms, styled themselves Kings of the *Two Sicilies*; as his present *Neapolitan* Majesty, a Prince of an extraordinary Merit, does. *Alphonfus I.* King of *Aragon*, was the first called King of *Naples*.

The King resides chiefly at *Naples*, Capital of the Kingdom; and situated on the Coasts of *Terra di Lavauro*, at the Bottom of a small Gulph. It has an Archiepiscopal See, and passes for one of the largest and most agreeable Cities of *Europe*, because of the great Number of Persons of Quality who reside there.

Bishopricks are so frequent and so numerous in this Kingdom, that I cannot place them all in the particular Description of it; since there are reckon'd 127 Bishopricks, and 24 Archbishopricks.

Here follows a more particular Description of the Kingdom of *Naples*.

The *TERRA DI LAVAURO*, contains *Naples*, *Arch.* *Nola*, *Sorrento*, *Massa*, *Averso*, *Vico*, *Capua*, *Arch.* *Cajazzo*, *Alisi*, *Calvi*, *Tiano*, *Venafri*, *Monte-Cassini*, *Sora*, *Aquino*, *Gaeta*.

The *CITERIOR ABRUSSO*, contains *Chieti*, *Arch.* *Lanciano*, *Arch.* *Salmone*, *Ortona*.

The *ULTERIOR ABRUSSO*, contains *Aquila*, *Arch.* *Campelli*, *Teramo*.

The County of *MOLISE*, contains *Bojano*, *Isernia*, *Trivento*.

The *ULTERIOR PRINCIPALITY*, contains *Benevento*, *Bishop.* *Couza*, *Ariano*, *Avelino*, *Bisaccia*, *Cedonia*, *Monte Marano*, *Monte Verde*, *Nusco*, *St. Agathe*, *Trevico*.

The *CITERIOR PRINCIPALITY*, contains *Salerno*, *Arch.* *Omalfi*, *Arch.* *Acerno*, *Campagna*, *Capaccia*, *Caggiano*, *Minari*, *Nocera*, *Policastro*, *Scala*.

The *CAPITANATE*, contains *M. S. Angelo*, *Arch.* *Manfredonia*, *Vieste*, *Forenzuola*, *Volturna*, *Lucera*, *Troya*, *Ascoli*.

The **BASILICATE**, contains *Acerenza*, Arch. *Rapolla*, *Melfi*, *Lavello*, *Venosa*, *Tricarico*, *Muro*.

The **TERRI DI BARA**, contains *Bari*, Arch. *Trani*, Arch. *Andria*, *Bitonto*, *Conversano*, *Monopoli*, *Polignano*, *Molfetta*, *Ruvo*.

The **TERRA DI OTRANTO**, contains *Otranto*, Arch. *Brondes*, Arch. *Tarente*, Arch. *Matera*, *Gallipoli*, *Lecce*.

The **CITERIOR CALABRIA**, contains *Cosenza*, Arch. *Rossano*, Arch. *Amantea*, *Martorano*, *Bisignano*, *Cariati*, *Umbriatico*, *Cassano*, *Strongoli*.

The **ULTERIOR CALABRIA**, contains *Reggio*, Arch. *St. Severino*, Arch. *Belcastro*, *Crotone*, *Taverno*, *Nicastro*, *Squillace*, *Monte-Leone*, *Melito*.

Antient LOMBARDY.

This third Part of *Italy*, which was antiently a Kingdom, is a little less fertile than the two others; particularly in the *Alps*, where the Soil is pretty sterile, except in Pastures; but in the Neighbourhood of its Rivers, which are in great Number, it is very little less fertile than *Naples*.

This Country is divided into several Sovereignities; the most remarkable of which are, the *Principality of Piedmont*; the *Dutchy of Montferrat*; the *Dutchy of Milan*; the Territories of the *Republick of Venice*; the *Bishoprick of Trent*; the *Dutchies of Mantua*, *Modena*, and *Parma*; the *Republicks of Genoa* and *Lucca*.

The first five make the Border of the Boot, and are found in the Order they are placed here, going from South by West, to North by East; the five others make that Part under the Knee, so that the *Dutchy of Mantua* is the furthestmost towards the State of *Venice*; the two others are nearer the Sea of *Genoa*, and the two *Republicks* are situated on the Coast, taking up the Extent from the *Principality of Monaco* to the *Pisan*.

Besides these Sovereigns, there are reckon'd eighteen or twenty others, either Princes, Dukes, Marquisses, or Counts. As the Duke of *Mirandola*, between the *Modeneze* and the *Mantuan*; those of *Sabionetta*, *Bozzuolo*, and of *Guastalla*; the Count of *Nuolara*, and Marquis *Castiglione delle Stivare*; in the *Mantuan*, the Prince of *Masse*, and the Marquis of *Malestine*, between the Territories of *Genoa* and *Lucca*; the Prince of *Corregio*, in the *Modeneze*; the Marquis of *Messaron* in *Piedmont*; the Count of *Novara* in the *Milaneze*; the Marquis of *Torriglia*, in the Territories of *Genoa*; the Prince of *Monaco* on the Coasts; the Marquis of *Mendola* in the *Romagna*; the *Republick of St. Marino*, in the *Dutchy of Urbino*; the Prince of *Piombino*, in the *Sienois*; the Duke of *Bracciano*, in *St. Peter's Patrimony*; *Porto-Longone*, in the Island of *Elbe*; and *Final*, on the Coasts of *Genoa*, near *Montferrat*; these two little Territories, with those of the Prince of *Corregio*, of the Lordships of *Piombino* and *Orbitello*, call'd *Stato delli Presidi*, are under the Protection of the King of *Spain*: All the others depend of their natural Princes.

The Queen of *Hungary* is Mistress of the County of *Goritz*, in the *Frioul*; of the Cities of *Pedena*, *Trieste*, &c. In *Istria*, which may be ranked among the Members of *Italy*, the *Switzers* are possessed of the Balliwicks, call'd of *Italy*, which I have mark'd in their Territories; and the *Grisons* their Allies are possessed of the *Valtelline*.

The STATE OF VENICE.

We call the State of *Venice*, all that Tract of Land the *Republick* possesses in *Italy*, which makes Part of the lower *Lombardy*.

This *Republick* is governed, ever since the Year 697, by a Duke, whom the *Venetians* call *Doge*. He is elected every three Years, by the Suffrages of the Nobles assembled, with extraordinary Precautions, and Circumstances; which it would take too much Room to be inserted here. It is said, that Pope *Alexander III.* being persecuted by the Emperor *Frederick Barbarouffe*, retired to *Venice*, that the *Doge*, *Sebastian Ziani*, undertook his Defence, defeated, and took Prisoner *Otho* the Emperor's Son; and that in Gratitude for so signal a Service, the Pope put a Ring on his Finger, made him Superior of the Sea, and order'd that the *Doges*, his Successors,

should marry the Sea every Year with the same Ring, insinuating thereby, that they had the same Power over it, as a Husband has over his Wife: That Ceremony is practised every Year, on *Ascension-Day*, with much Magnificence, and a great Solemnity; the *Doge*, accompanied with the Nobles, and the Council, ascend the Vessel call'd *Bucentaure*, at the Noise of the Artillery; and advancing a little into the Gulph, throws the Ring into the Sea, after some Prayers; then it is taken out, when the Ceremony is ended, because it is tied at the End of a String.

The State of the *Republick of Venice* is divided into several small Territories: First all the Coast, which extends from the Mouth of the *Po delle Fornace* to *Marano*, including likewise all the Isles which are in that Extent; even that of *Grado*, is call'd *Il Dogado*, i. e. the *Dutchy*, or *Country of the Doge*. Joining this little State, is found, Northward; the *Frioul*; at its North by West the *Marche Trevisan*, which includes the *Trevisan*, the *Feltrin*, the *Bellunese*, and the *Cadotin*; Westward of it, the *Paduan*, and the *Vicentin*, which is between this and the *Bishoprick of Trent*; Southward of the *Adige*, the *Polesine of Rovigo*, separated from the *Paduan* by that River. Between these two last Territories, and the Lake *Garda*, is found the *Veronese* in the Neighbourhood of the *Adige*; between that Lake and the River *Oglio*, the *Bressan*: Lastly, between that River and the *Adde*, the *Bergamasco*, and the *Cremafc*.

VENICE, Capital of this State, is honoured with a Patriarchal See, ever since the Year 1350. It is situated at the Bottom of its Gulph, and divided into 72 Isles, in which it is built. *Venice* is one of the best built, and most flourishing Cities of *Europe*; the *Italians* call it *Venetia la Ricca*. In Fact, it passes for one of the most trading, and richest Cities of the World: It contains a great Number of Rarities of great Value; and the Palace of the *Doge* is a noble Edifice.

The *Republick* possesses besides in *Istria*, which is a Peninsula southward of *Carniole*, all the Isles which are in the Gulph, towards the Coasts of *Morlakhia* and *Dalmatia*, with that Part of the Province which is towards the Sea, including all the Coasts; and likewise the Places which are round the Gulph of *Catara*, with *Budua*, on the Coasts of *Albania*; *Butrinto*, *Laperga*, and the Isles of *Corfu*, *Cefalonica*, *Zante*, *Paxu*, *Antipaxu*, and others on the Western Coasts of *Greece*, and some in the *Archipelago*.

The Isle of *CORFU*, is situated on the Coasts of *Epirus*, under the 38½ Degree of Latitude, and the 44½ of Longitude. It may have 20 Leagues in Length, from South to North by West; 7 or 8 in Breadth, and 45 Round. Its Capital, which bears the same Name, is an Archiepiscopal See.

The Isle of *CEFALONICA*, which is the antient *Samos*, is situated at the Entrance of the Gulph of *Patras*, under the 37 Degree of Latitude, and the 46 of Longitude. It has about 18 Leagues in Length from South to North by West, 12 in Breadth, and 50 in Circuit: Its Capital, which bears the same Name, with the Title of *Bishoprick*, is the Seat of the Governor, or *Proveditor*, who is always a noble *Venetian*.

The Isle of *ZANTE*, which is Southward of this, is not half so large; though it has two Bishops, one *Latin*, and the other *Greek*.

A more particular Description of the State of *Venice*, is as follows:

The *DOGADO*, contains *Venice*, Patriarch. *Grado*, *Torcello*, *Caorle*, *Castel-novo*, *Marano*, *Cbiofa*, *Leo*, *Bebbe*, *Lored*.

POLESINE of ROVIGO, contains *Rovigo*, Bishop. *Adria*, *Lenderana*, *Labadia*.

The *PADUAN*, contains *Padua*, Bishop. *Este*, *Montagnana*, *Castel-Baldo*, *Monfelic*, *Citadella*, *Mirano*, *Campo S. Pietro*, *Oriago*, *Piove di Sacco*.

The *VERONESE*, contains *Verona*, Bishop. *Pesciera*, *Malsesene*, *Garda*, *Cbiofa*, *St. Bonifacio*, *Leguano*, *Sirmian*.

The *BRESSAN*, contains *Brescia*, Bishop. *Monte-Chiaro*, *Osola*, *Ponte-Vigo*, *Ozzi-nuovi*, *Ozza-vecchi*, *Rocca d'anso*, *Iffco*, *Salo*.

The **BERGAMASCO**, contains *Bergama*, Bishop. *Martino*, *Romano*, *Cluson*, *Calepio*.

The **CREMASCO**, contains *Crema*, Bishop.

The **FRIUL**, contains *Aquileia*, ruined. *Udina*, Patriarch. *Marano*, *Palma-nuova*, *Ciuta di Friuli*, Bishop. *Venzona*.

The **TREVISAN MARCH**, contains *Trevisa*, Bishop. *Ceneda*, Bishop. *Conegliano*, *Serravalla*, *Odezzo*, *La Motta*, *Cadore*, Bishop. *Beluna*, Bishop. *Festres*, Bishop.

The **VICENTINE**, contains *Vicenza*, Bishop. *Marefistica*, *Orgnano*, *Lonigo*.

ISTRIA, contains *Capo d'Istria*, *Cita-nuova*, Bishop. *Parento*, *Puola*.

In **DALMATIA**, *Zara*, Arch. *Nona*, *Novigrod*, *Scardone*, *St. Nicolas*, *Zebeuco*, *Spalatro*, Arch. *Cliffa*, *Salone*, *Almiffa*, *Starigrad*, *Vesicchio*, *Cataro*, *Budua*.

ISLES, *La grande*, *Incoronadro*, *Solta*, *La Brazza*, *Garzola*, *Torta*, *Offero*, Bishop. *Cherso*, *Vegia*, *Arbe*, *Paga*.

BISHOPRICK OF TRENT.

This Bishoprick is all environ'd with the Territories of the State of *Venice*, except Northward, where it has for Bounds the Country of *Tyrol*. The Bishop is Lord Temporal and Spiritual of the greatest Part of it. The Country is pretty rich, because it is one of the greatest Thoroughfares, from *Italy* into *Germany*.

The City of **TRENT**, which is the Capital thereof, is situated on the *Adige*, in an agreeable Valley, environ'd with high Mountains. The Bishop is elected from among the Prebendaries of the Cathedral Church, who are all Noblemen. He may have 50,000 Florins Revenue, and his Church, called *St. Vigilius*, is marvellous for its Architecture.

The DUTCHY OF MILAN.

This State depends at present of the Queen of *Hungary*, where she keeps a Governor.

The City of *Milan*, which is the Capital, passes for one of the greatest of *Europe*. It is situated between the *Add* and the *Tesin*, whence have been drawn two Canals, by Means thereof, all Sorts of Commodities are brought to *Milan*, which renders it a very trading City. It is very well fortified, has a strong Citadel, and has been from Time to Time the Theatre of the War, between the *French*, *Spaniards*, *Germans*, and *Italians*. It has been besieged above 40 times, and taken 23. It has an Archiepiscopal See, and a Senate composed of a President, and 12 Senators.

PIEDMONT.

The Principality of *Piedmont*, is in the Power of the King of *Sardinia*, as Duke of *Savoy*, who keeps his Court at *Turin*, Capital of this State. This Prince possesses besides Part of the Dutchy of *Montferrat*.

The City of **TURIN**, is situated on the *Po*. The Dukes of *Savoy* have spar'd nothing to render it an accomplish'd City. Their Court is the most splendid of *Europe*, after that of the King of *France*; the Chamber of Accounts, the Archiepiscopal See, and the University, are no small Ornaments to it. Its fine Fortifications, and strong Citadel, shelter it against the Insults of its Neighbours.

CASAL, an Episcopal City on the *Po*, is the Capital of *Montferrat*. It is in that Part of the Dutchy, in the Possession of the House of *Austria*; and has acquir'd a great Reputation by the famous Sieges it has maintain'd, by its Fortifications, and its strong Citadel.

Here follows a more particular Description of these Territories.

The **PIEDMONT**, contains *Turin*, Arch. *Susa*, *Asti*, Bishop. *Veillane*, *Ville-Franche*, *Ivrée*, Bishop. *Masseran*, Princip. *Aouft*, Bishop. *Castiglione*, *Pignerol*, *Saluces*, Bishop. *Tende*, County. *Barcelonetta*, Princip. *Vercell*, Bishop. *Niffe*, County. Bishop. *Beuil*, County. *Foffano*, Bishop. *Mondovi*, Bishop. *Oneglia*, Bishop.

The Part of *Montferrat*, contains *Albe*, Bishop. *Trin*, *Livorno*, *Bianza*, *Salugia*, *Virenlago*.

The Bishoprick of **TRENT**, contains *Trent*, Bishop. *Personaro*, *Roveredo*, *Riva*, *Lodrone*, *Madruzzo*, *Boisano*.

The Dutchy of **MILAN**, contains *Milan*, Arch. *Pavia*, Bishop. *Como*, Bishop. *Novare*, Bishop. *Loddi*, Bishop. *Bobbio*, Bishop. *Alexandria de la Paille*, Bishop. *Vigevano*, Bishop. *Cremona*, Bishop. *Tortone*, Bishop. *Casal-Major*, *Voghera*, *Anghiera*, *Ugogna*, *Marignan*, *Mortare*, *Carravaggio*, *Lecco*.

MANTUAN.

This Dutchy was once govern'd by its own Dukes, of the House of *Gonzague*, who stiled themselves Dukes of *Mantua*, *Montferrat*, and *Nevers*, perpetual Vicar of the Holy Roman Empire. But the House of *Austria*, under some Pretensions or other, which *Louis XIII.* King of *France*, proved in 1629, *Ratione ultimâ Regum*, to be without Foundation, as they were in Fact, has took Possession of it. It was erected into a Dutchy by *Charles V.* being but a Marquisate before.

The City of **MANTUA**, which is the Capital, is situated in the Middle of its Lake. It is fair, large, and adorn'd with an Episcopal See, which depends immediately of the Pope. It has the Glory of having been the Country of *Virgil*, Prince of the *Latin* Poets, and of *Tasso*, the *Virgil* of the *Italians*.

MODENESE.

The Estate of the Duke of *Modena*, contains besides its Dutchy, that of *Reggio*, one Eastward of the River *Secchia*, the other Westward. This Duke is of the House of *Est*, and depends of the Emperor, to whom he pays 4000 Crowns yearly, in Acknowledgment for the feodal Homage; for he holds in Fief *Modena*, *Reggio*, *Carpi*, *Frignano*, and *Carafagnane*.

The City of *Modena*, situated between the Rivers *Secchia* and *Panaro*, is the Capital, and an Episcopal See. In this City *Brutus* sustain'd all the Efforts of *Mark Antony*, after *Julius Caesar's* Death: In the Year of the Foundation of *Rome* 710.

The PARMESAN.

This State underwent several Revolutions, ever since the Decay of the *Roman* Empire; till the Church being possess'd of it, the Pope, *Paul III.* called before his Exaltation to the Pontifical See, *Alexander Farnese*, made *Peter Louis* his Son, Duke of *Parma*, in 1545. This Duke was kill'd three Years afterwards by the *Palavicini*, and other his Enemies, solicited to it by the Emperor *Charles V.* *Octavio Farnese* was disturb'd by the same Emperor, but was powerfully protected by the *French*, and secured that Dutchy in his House, by his Marriage with *Margarette* of *Austria*, *Charles's* natural Daughter.

It contains the Dutchies of *Parma* and *Placentia*, and the Territories of *Busseto*, and *Val di Turo*. Its Duke is Vassal of the Church, i. e. of the Holy See, to whom he pays 10000 Crowns of annual Tribute.

The City of **PARMA**, which is the Capital, is situated on the River of the same Name; it is an Episcopal See, and has an University.

A more particular Description of these different Territories is as follows:

The Dutchy of **MANTUA**, contains *Mantua*, Bishop. *Giato*, *Solfarino*, *Castiglione delle Stivere*, Princip. *Canello*, *Uftiano*, *Bozzuolo*, Princip. *S. Martino*, *Sabionette*, Princip. *Guastalla*, *Newlate*, *Viadana*, *Borgo-forte*, *Gonzaga*, *Luzzara*, *Rever*, *Sermedo*.

The Part of **MONTFERRAT**, contains *Casal*, Bishop. *Acimiano*, *Balzola*, *Acqui*, Bishop. *Ripalta*, *Spinola*.

The Dutchy of **MODENA**, contains *Modena*, Bishop. *Carpi*, Princip. *Final*, *Mirandola*, Dutch. *Concordia*, *Coregio*, Princip. *Spilimbergo*, *Sassuolo*, *Gaya*, *Scandiano*, *Vignola*, *Frignano*, *Sestola*, *S. Andrea*, *Reggio*, Dutch. *Bersiko*, *Montecchio*, *Canossa*, *Castil-nuovo di Carafagnone*, *Terrezano*, *Gualtieri*, *Carpenette*.

The REPUBLICK OF GENOA.

The State of this Republick, called Coast or River of *Genoa*, is the antient *Liguria*. It has been under the Domination of so many different Masters, that they could scarce be enumerated in a whole Treatise of them. It has had Counts, Consuls, Podestats, Captains, Governors, Rec-tors of the People, Abbots of the People, Reformators, and

and lastly, popular Dukes and Nobles, who govern at present the Republick. The *Genoese* have suffer'd by their Inconstancy, 12 Sorts of Governments in less than 34 Years. They have rendered themselves by their Infidelity and Treasons, so odious to all Sovereigns, that none would take them under their Protection. Once the Ambassadors of *Genoa* came into *France*, to offer their City to King *Louis XI.* telling him, that it gave itself to him to have his Protection: The King answer'd them, and I give it to its Inhabitants, who are more dangerous Masters than I am.

Note, That the *Genoese* are very good Sailors; they took antiently the Isles of *Corfica*, *Sardinia*, and *Cyprus*, and others from the *Saracens*: They are yet Masters of the first. It is said in common Proverb, speaking of the Coast of *Genoa*, *Gente senza fide*, *Mare senza pisce*, *Alberi senza frutto*, *Monte senza legno*; and *Donne senza vergogna*, i. e. "A Nation without Faith, a Sea without Fish, Trees without Fruit, Mountains without Wood, and Ladies without Shame.

The Archiepiscopal City of *GENOA*, is the Capital of the Country. It is situated in the Middle of the Coast, and is magnificently built: It maintains several beautiful Manufactures, and carries on a very great Commerce of Silks, and Soap. The *Italians* call it *Genua la superba*.

THE REPUBLICK OF LUCCA.

The small Territory of the Republick of *Lucca*, which is almost all inclosed within those of *Tuscany*, was sold and sold over-again several Times, to divers Sovereigns. Afterwards it had a Democratical Government; at present it is govern'd by a *Gonfalonier*, who is elected every two Months among the Nobles. That *Gonfalonier* is assisted by nine Elders, who are stiled *Excellentissime*, and are changed like the *Gonfalonier*, six Times every Year. It is under the Protection of the Emperor.

The City of *LUCCA*, which is the Capital, is situated on one Arm of the River *Serchio*. It has a Bishop who wears the Cross and Pallium, like an Archbishop: The Prebends of the Cathedral Church wear white Mitres, like the Cardinals. It is fortified with eleven regular Bastions, with their Courtins; the whole lin'd with Brick, and very deep Ditches, ever since the Year 1620. The City is very rich by Reason of the great Commerce of Silks it carries on.

The other Petti-Princes of *Italy*, govern each their Territories, under the Protection of some supreme Power, as the Pope, the Emperor, the King of *Spain*, &c.

The little Republick of *S. Marino*, maintains always its Liberty under the Pope's Protection, in whose Territories it is enclosed. It keeps always its Gravity with the other Republicks, and when it writes to that of *Venice*, it stiles it *Charissima Sorella*.

The City of *S. Marino*, is situated on the Top of a high Mountain. It has two or three Castles, and some small Boroughs; the whole in the Extent of the Dutchy of *Urbino*.

Here follows a more particular Description of all those different Territories.

The Dutchy of *PARMA*, contains *Parma*, Bishop. *Borgo S. Dodino*, *B. val di Taro*, *Chiesa di Taro*, *Zanaterella*, *Busseto*, *Rossena*, *Fornoua*, *Cornigliano*, *Cholono*, *St. Secondo*, *Soragna*.

The Dutchy of *PLACENTIA*, contains *Placentia*, *St. Stefano*, *Masse*, Princip. *Carrara*, *Malispina*, Princip. *Fordinuovo*, *Filatterra*, *Gragnua*.

The Republick of *GENOA*, contains *Genoa*, Arch. *Ripallo*, *Laoagna*, *Spezza*, *Sazzana*, *Brugnetto*, *Torreglia*, Princip. *Savona*, *Noli*, *Final*, *Arbenga*, *Oneglia*, *Ventimiglia*, *Monaco*, Princip.

The Republick of *LUCCA*, contains *Lucca*, *Camajore*, *Montignoso*, *Minucciano*, *Castiglione*.

S I C I L Y.

The Isle and Kingdom of *SICILY*, once the Country of the *Cyclops*, and *Leſtrigons*, was also called the *Island of the Sun*, and *Trinacria* because of its three Caps. Its Form which is triangular, is disposed in such a Manner with Regard to the Heavens, that one of its Points,

which the Antients called *Polarum Promontorium*, at present *Capo di Faro*, is at the North by East: That which they called *Pachynum Promontorium*, at present *Capo Passaro*, is at the South by East; and that which bore the Name of *Lilibæum Promontorium*, at present *Capo di Coco*, is Westward.

It is situated in the *Mediterranean*, between the 36 and 40 Degree of Longitude, extending from the 35. 30 Min. of Latitude, as far as beyond the 38; having 70 Leagues in its greatest Length from West to North by East, i. e. from *Marsala* to *Capo Faro*, near *Calabria*; 55 in its Length from East to West, i. e. from *Augusta* to *Trepani*; 50 in its greatest Breadth from the Point of Port *Pilo*, which is the most Meridional of the Island, as far as to Cape *Rafocalmo*, beyond the *Far*; and 190 of Coasts, or of Circuit; that is to say, without reckoning the Curvity of the Gulphs of *Catania*, *Potti*, *Termini*, *Castel à mare*, &c.

The Climate is very good, and the Soil so very fertile in Corn, Wine, and all Sorts of Fruits, that it was called antiently the *Granary of Italy*. It produces a great Quantity of Wax, Honey, Sugar, Oil, Saffron, and several medicinal Plants. It feeds a vast Number of Silk-Worms; it has Mines of Gold, Silver, Iron, and other Metals, as well as of Salt, Agaths, Emeralds, Jasper, Porphyry, and other precious Stones; very beautiful Coral is fish'd on the Coasts, particularly towards *Trapani*. It has Forests, and very good Pasture which feed a great Number of Cattle; there are seen in it wild Boars, Deer, Partridges, and other Game.

Its principal Rivers are, first *Salso* and *Dataino*, which take their Source towards the Middle of the Isle, and run one Southward and the other Eastward: *Termini*, *Belice*, and *Platani*, in the western Part of the Isle; running one to the Northward, and the other Southward; *Traina* and *Cantara*, in the Northern Part, which runs one to the Northward, and the other Eastward. There are several others which are full as large.

Among the great Number of its Mountains, Mount *Etna*, otherwise Mount *Gibel*, is very remarkable. It is extraordinarily high, the Top of it always cover'd with Snow, and from the Middle thereof issues out Flames as from a Furnace. This frightful Vulcano throws out Ashes with such Violence, that they often damage the neighbouring Places a League round it. But when those Ashes are in a small Quantity, they only serve to fatten the Land. The City of *Catania*, has often been burnt by that Fire.

The Rivers of *Salso*, *Dataino*, and Part of that of *Tormini*, with some Mountains, divide *Sicily* into three Parts, called *Valleis*. The first which is Westward of the two others, is called *Val di Mazara*, because of a City of the same Name which is on its meridional Coast. The two others are Eastward, one called *Val di Demona*, is Northward; and the other called *Val di Noto*, because of a City of the same Name advances Southward.

PALERMO, passes for the Capital of this Kingdom, though *Messina* claims that Honour. It was the usual Place of Residence of the Kings of *Sicily*, and is still at present that of the Viceroy's, and of an Archbishop. It is a large, agreeable, and very rich City; has a fine Port, with a Mole fortified with a very strong Castle.

MESSINA, is also an Archiepiscopal City, situated near the Vale of the same Name. It has a very fine Port, and the best Families of *Sicily* live in it.

SYRACUSA, an Episcopal City, is situated on the Eastern Coast of the *Val di Noto*. It has been famous for its antient Republick, and for having been the Country of the famous *Archimedes*.

Note, That the *Sicilians* are subtle, cunning, eloquent, and merry. They love Novelty, and are malicious, inconstant, and vindictive. They are mistrustful, Dissemblers, and Enemies of Trouble and Labour.

Note also, That *Sicily* was once the Theatre of the War, between the *Romans* and *Carthaginians*; ever since it had several Sovereigns, and in 1282, the *French*, who were there, were all assassinated by the Treason of the *Spaniards*, during the Vespers of *Easter-Sunday*, and it is what is called the *Sicilian Vespers*: Ever since that Cruelty

Cruelty it had remained under the Domination of the Kings of *Spain*, till the Treaty of *Utrecht*, when it was given to the Duke of *Savoy*, who chang'd it afterwards with the Emperor for *Sardinia*, which whole Kingdom is not worth the single City of *Messina*.

Note again, That the *Catholick* Religion is follow'd in this Kingdom, tho' there be in it a great Number of *Christian Greeks*, particularly at *Messina*, where they have their own Churches.

A more particular Description of *Sicily* is as follows :

The VAL' DI MAZARA, contains *Palermo*, Arch. *Mont-Real*, Arch. *Paligmita*, *Castel á mare*, *Calatafimi*, *S. Vito*, *Trapani*, *Marsalla*, *Mazara*, Bishop. *Xacca*, *Pintia*, ruined, *Gergenti*, Bishop. *Miranda*, *Salemi*, *Bivona*, *Castel-Vetrano*.

The VAL' DI DEMONA, contains *Messina*, Arch. *Melazzo*, *Patti*, Bishop. *S. Marco*, Bishop. *Cefale di*, Bishop. *Termini*, *Polizzi*, *Capizzi*, *Mistretta*, *Troina*, *Ali*, *Schizone*, *Catania*, Bishop. *Randazzo*, *Nicosia*, *Centaervi*.

The VAL' DI NOTO, contains *Noto*, *Motya*, *Syracusa*, Bishop. *Agusta*, *Leontini*, *Farratana*, *Castrogiovanni*, *Calata-fibetta*, *Xieli*, *Catala-girone*, *Buteria*, *Alicata*, *Platio-nuovo*, *Terra-nuova*, *Camarana*, *Modica*.

SARDINIA.

This Island which has borrow'd its Name, as it is said from one *Sardus*, is also a Kingdom. The *Greeks* have called it *Sandaliotis*, because it has the Figure of the Sole of a Shoe.

It is situated on the *Mediterranean*, between the 37 and 40 Deg. of Latitude, extending from the 31. 10 Min. of Longitude, as far as to the 33. 15 Min. so that it may have 56 Leagues in its greatest Extent from South to North; 30 from East to West; between *Cagliari* and *Oristagni*, only 15; and about 150 in Circuit.

The Climate is very bad, and corrupted in Part, because of the great Number of *Mafalo's* kill'd there, whose Carcases remain in the Fields. The Soil though full of Mountains, is fertile enough in Wheat, excellent white Wines and Oils. It has Mines of Silver, Sulphur, and Allum; it feeds a great Quantity of Cattle and Game, and has no other venomous Beast but a Kind of Spider, or Ant, they call *Solifugi*, which are found in the Mines of Silver, and whose Sting is mortal. Abundance of Salt is made on the Coasts, and red Coral fish'd along them, but the Fish is not good.

There are but few Rivers in this Island, and those have very bad Water; so that the Inhabitants are obliged to keep Rain-Water, which falls but seldom.

It is divided into two Parts: The first which is Southward, is called *Capo di Cagliari*; and the other which is Northward, *Capo di Lugodori*.

The City of *CAGLIARI*, situated on the eastern Coast, is the Capital, and an Archiepiscopal See, the usual Place of Residence of the Viceroy. *Aristagni*, and *Sassari*, on the western Coast, are also Archiepiscopal Sees.

Note, That the *Sardinians* were naturally strong, inured to Fatigue, and courteous to Foreigners; but the *Spaniards* have render'd them unkind, lazy, and prodigal, minding very little else but Dancing and Drinking.

Note also, That this Island, like *Sicily*, was once the Theatre of the War between the *Romans* and *Carthaginians*. The first remain'd peaceable Possessors of it till the *Saracens* expell'd them; then the *Pisans* and *Genoese*, ravish'd it from these, and divided it among them. But to avoid the Differences which arose in that Division, the Pope gave it to *James* King of *Aragon*, whence it came in the Power of the King of *Spain*, and at the Peace of *Utrecht*, in that of the Emperor; and lastly in that of the Duke of *Savoy*, at present styl'd King of *Sardinia*.

Note, again, That none but the *Catholick* Religion is profess'd publicly in the Isle of *Sardinia*.

CORSICA.

This Island is Northward of *Sardinia*, from which it is separated but by a Traject of an Hour's Sail.

It is situated between the 40 and 42 Degree of Latitude; extending from the 31 Deg. 30 Min. of Longit. as far as to the 30 Deg. 40 Min. so that its greatest Extent from South to North, is of about 38 Leagues; from East to West, of about 17; and it may have about 90 Leagues in Circuit.

The Climate is bad, and unwholesome; its Soil stony, sandy, and full of Forests, so that nothing grows in it, but with a great deal of Care: It produces Wheat in the Valleys, pretty good Wines and Fruits: There are found in it Pheasants, Harts, Deers, &c. and all Sorts of Cattle.

There is seen in the Middle of the Island the Mount *Goradaccio*, on which are found the Lakes of *Crena* and *Ivo*, very near one another. From the first run the Rivers *Liamon* and *Tavignan*, one running Westward, and the other Eastward. From the Lake *Ivo* runs that of *Guolo*, which waters the County of *Mariana*: These three Rivers are the only considerable Ones in *Corfica*.

The Natives of the Island divide it into four Parts, according to the four principal Points of the World: They call the Eastern Part, *Banda di Dentro*; the Western, *Banda di Fuore*; the Southern, *Di là Monti*; and the Northern, *Di quà Monti*.

There is no remarkable City in *Corfica* except *Bastia*, which is the Capital. It is situated on the Eastern Coast *Di qua Monti*; the Governor of the Island resides there, as well as the Bishops of *Mariana*, and *Aleria*, whose Cities are ruined.

Note, That the *Corficans* are uncivil, rough in their Manners, quarrelsome, and vindictive; but they are brave and very good Soldiers.

Note, also, That this Island has been in the Power of the *Genoese* more than 800 Years; but the *Corficans* attempted to shake off their insupportable Yoke, encouraged to it by a *German* of a bold, courageous, and enterprising Genius, whom I saw in *Italy* in 1726, and with whom I have din'd several Times: He was proclaim'd King of *Corfica* by his Partisans, and had kept longer his Royal Dignity, if the Succours sent to him had been as powerful, as his Courage was great.

Note, again, That the *Catholick* Religion is the only one practis'd publicly in *Corfica*: It has five Bishopricks, viz. *Sagona*, *Aleria*, and *Adjazzo*, Suffragants of *Pisa*; *Mariana* and *Nebbio*, Suffragans of *Genoa*.

MALTA.

The Isle of *MALTA* was called by the *Greeks* *Ogygia*, and *Hiperia*; the *Latins* call it *Melita*.

It is situated Southward of *Sicily*, under the 34 Deg. 40 Min. of Latitude, and 38 Deg. 45 Min. of Longitude: It may have seven Leagues in Length, four in Breadth, and twenty of Circuit, because of the Curvity of its Shore.

The Climate is pretty wholesome, though a little hot; but it is tempered by the Winds in the Afternoon. The Soil produces a small Quantity of Wheat and Barley, excellent and very large Grapes, Citrons, Olives, Figs, and all the Fruits which grow in *Italy*: Its greatest Fertility is in Cotton and Honey; it feeds Horses and other Cattle; there are found in it excellent Falcons, and other Birds of Prey; Hares, Partridges, Quails, and other Game. Wood is so scarce there, that it is sold by the Pound; and the Dung of Animals, or Thistles, is the ordinary Fuel: It is said, that it breeds no Serpents; or, at least, that they have no Venom, ever since the Naufrage of *St. Paul*.

This Island is in the Power of the *Knights* of the Order of *St. John of Jerusalem*, call'd *Knights* of *MALTA*, ever since the Year 1530, when *Charles V.* gave it them, seeing they had no fix'd Habitation ever since they had lost *Rhodes*, in 1522. Every Body knows what Esteem the Christian World has for this ancient and most illustrious Order; and what Rank the *Grand Master*

Master of it keeps among the Christian Princes.

Note, That the Inhabitants are a Mixture of *Latin* and *Greek* Christians: Their Language is a corrupted *Arabic*, very much like the *Lingua Franca*, on the Port of *Constantinople*: They are ingenious, patient, and courageous; but mistrustful, jealous, perfidious, and vindictive: The Women are as witty as they are cunning, and inclinable to Gallantry: Several Ladies of Pleasure resort thither from all Parts, for the *secret Services of the Knights*.

The capital City of this Island, is at present divided into four Parts; which are *La Cita Valetta*, the Borough, the City of *St. Michel*, and the *Cita Cottonazza*: The first is found at the Entrance of the Port, built on a Rock, which advances towards the North by West, where the *Grand Master* resides. There is seen on the Point, the Castle *St. Elmo*, against which the *Turks* fired 78,000 Cannon Shot, during the Siege in 1565. The Port on the right Hand is call'd *Mar Mucetto*; and that on the Left only *Marza*, or the great Port. The Borough, call'd *Cita Vittosa*, ever since the same Siege, and the City of *St. Michel*, or the *Isle of the Sangle*, are also built on two narrow Pieces of Land, which advances towards the Flank of *La Valette*, on the Side of the Port. These two Cities are between the Port of the *Sangle*, and that of *La Renelle*, separated by the Port of the Galleys. The Castle *St. Angelo*, is built at the Point of the Borough, on a Rock. The *Cita Cottonazza*, is a new City, whose Circuit, which makes almost an oval, is fortified with nine double Bastions, and two half Bastions, which terminate one at the Head of the Borough, the other at the Island of *La Sangle*; the Courtins are cover'd with eight good Ravelins, the whole cut in a Rock; therefore that Circuit incloses the Borough of *La Bormelu*, and the whole Fortifications of *St. Marguerite*. To enter the Port, one must pass between the Fort *St. Elmo*, and the Point of *Orsa*, where is built a Fort call'd *Ricazzoli*. In the *Murza Mucetto* there is a small Island, where the *Lazaretto* is, and where a little Fort is built to defend the Entrance thereof: Therefore this Place passes for the strongest of the whole World, because there is no Ground for 500 Paces round about it: It is the See of a Bishop suffragant of *Palermo*.

A more particular Description of all these Isles, is as follows:

SARDINIA.

The CAPO DI CAGLIARI, contains *Cagliari*, Arch. *Villa d' Iglesia*, Bishop. *Oristagni*, Archbish. *Tor-Alba*, *Mont-Real*, *St. Pietro*, *Galtelle*, *Lode*.

CAPO DI LUGODORI, contains *Fassari*, Archbish. *Castel-Aragonefe*, Bishop. *Terra nuovo*, *Carignano*, *Bosa*, Bishop. *Algeri*, Bishop.

The Isle of CORSICA, contains *Bastia*, *St. Fiorenzo*, *Nebio*, ruinat. Bishop. *Ostrione*, ruinat. Bishop. *Marianna*, ruinat. Bishop. *Calvi*, *Accia*, ruinat. *Corte*, *Aleria*, ruinat. Bishop. *Sagona*, ruin. Bishop. *Adjazzo*, Bishop.

The Island of MALTA, contains *La Valetta*, *Il Borgo*, *St. Michel*, *Medina*.

The Isle of LIPARI, contains *Lipari*, Bishop. *Volcano*, *Palmeria*, *Alcudia*, *Ustica*, *Saline*, *Panaria*, *Strongoli*.

The Isles towards SARDINIA, are, *St. Pietro*, *S. Antiocho*, *Tavolara*, *Asinara*, *Di Toro*, *Di Vacca*.

TURKY in EUROPE.

We call TURKY in Europe, all the Tract of Land which the *Turks* possess in that Part of the World.

It extends in Latitude from Cape *Matapan*, towards the 35 Degree, as far as beyond the River *Niefter*, towards the 49th; and in Longitude, from *Kanise* in Hungary, about the 40 Degree, to the Mouth of the *Nieper*, towards the 57 or 75; adding to it the *Little Tartary*, which is only under the Protection of the *Grand Signior*; so that without including the *Little Tartary*, and the Island of *Candia*, which is likewise of that Empire, the greatest Extent of that Country, from South to North, is of about 290 Leagues; from East to West of 250; at least in the Northern Part, for in the Southern it is very irregular.

It confines, Northward, with the Territories of Po-

land, and the *Christian Hungary*; Eastward with the Sea *Delle Zabache*, or *Palus Maotides*, the *Black Sea*, that of *Marmara*, and the *Archipelago*; Southward with the *Mediterranean*; and Westward with the Gulph of *Venice*.

The Climate is very mild and temperate, and the Soil, tho' various, generally very fertile in all Things necessary for Life. I'll particularize its Qualities, in the particular Description of each Province.

Its principal Rivers are the *Danube*, which traverses Hungary, passing at *Strigonia*, *Buda*, and *Belgrade*, then separating that Kingdom from *Valachia*, *Moldavia*, *Servia*, and *Bulgaria*, it divides itself into seven or eight Branches, to disembogue into the *Black Sea*. The *Teisk*, or *Tibisc*, which has its Source, and its whole Course in Hungary, then disembogues into the *Danube*. This great River receives likewise the *Drave*, and the *Save*, between which *Esclavonia* is enclosed, separated from Hungary by the first, and from *Bosnia* by the last. The *Maziza*, whose Source and Course is in *Romania*, where it goes to disembogue into the *Archipelago*, after it has passed through the Cities of *Philippopoli*, *Adrianople*, and *Trajanapoli*. The Rivers which are Southward are not so considerable, but there are found on that Side several large Gulphs, as those of *Caridia*, *Contessa*, *Monte Santo*, *Ajomana*, *Salonichi*, *Armiro*, *Angia*, *Napoli*, *Coron*, *Arcadia*, and the Gulph of *Lepantbe*, famous for the signal Victory, the *Christians* under the Conduct of Don *John of Austria*, gain'd over the *Turks*, who lost 180 Galleys, 15000 Men, besides 4000 Prisoners, and 12000 *Christian* Slaves released from their Slavery, in 1571.

TURKY in Europe, is divided into twelve principal Parts, viz. two Southward, which are *Romania* and *Greece*; four in the Middle, Southward of the *Danube*, and of the *Drave*, which are *Bulgaria*, *Servia*, *Bosnia*, almost all *Esclavonia*, with Part of *Croatia* and *Dalmatia*. The *Venetians* have been Masters of almost all the Coasts thereof, and of the Isles; without reckoning the Territories of the Republic of *Ragusa*, which is only tributary of the *Turk*; four Northward of the same Rivers, viz. Part of Hungary, *Valachia*, *Moldavia*, which are only tributary. I'll add to it the *Little Tartary*, which is under his Protection, and the Isle of *Candia*, with those in the *Archipelago*, which are under his Domination.

The City of *Constantinople*, which is thought to be the antient *Bizantium*, and which the *Turks* call *Stambol*, is the Capital of the whole *Ottoman Empire*. It is situated on the Streight of the same Name, called antiently the *Bosphorus of Thracia*, which joins the Sea of *Marmara*, with the *Black Sea*. The Emperor resides there, and the first Patriarch of the *Greek Church*, and that of the *Armenians* keep there their Patriarchal Sec.

Note, That the *Turks* are naturally ambitious, though rough, and lazy to Excess. They are great Epicures, slovenly and brutish in their Amours; they are very good Soldiers, and expose themselves freely to Danger, because they believe Predestination; tho' their Behaviour smells much of Slavery; they are very courteous to Strangers, and very charitable to Foreigners and Travellers, for whose Conveniency some of them cause to be built *Kans*, or *Karavenseras*, which are like Hospitals, for their Reception. They are so compassionate, and good-natur'd, even towards Animals, that some of them, at their Death, leave Legacies to their Horses, Dogs, &c. that they may have enough for their Subsistence without Working. Though the Use of Wine be forbidden, several of them get themselves drunk in the Night-time. I happen'd in the Year 1727, to be at *Chalons* on the *Soane*, in *Burgundy*, with an Aga of the Janissaries, who made a Scruple to eat of the Fowls serv'd at Table, because they were larded with Bacon, but made nothing of drinking four Bottles of *Burgundy* at Supper; and when I objected to him that Wine was equally forbid by the *Alcoran*, he answer'd not on a Journey, or when they are indispos'd; tho' I have found no such

Exception in that Book of *Mahomet's* Dreams. The same Alcoran allows them as many Wives as they can maintain, but they keep those Wives very close, and have them serv'd by none but Eunuchs.

Note also, That *Turky* in *Europe* contains very near the whole Eastern Empire, where the *Greek* Emperors reign'd, ever since *Nicephor*, created in the Year 802, to *Constantine* XV. who was killed in the Plunder of *Constantinople*, when that City was taken by *Mahomet* II. Emperor of the *Turks*, in the Year 1453; ever since the Empire has been govern'd by the *Ottomans*, who have conquer'd it, and extended the Limits thereof with an incredible Celerity.

The Sovereign of this vast Empire, is commonly called the *Great Turk*, or *Grand Seignior*; he keeps in most of the Provinces, *Beglierbegs*, i. e. General Governors, who have under them several *Sangiacks*, or particular Governors. We reckon in *Turky* in *Europe*, eight *Beglierbegs's*, otherwise called *Bashaws*. The first and most considerable is that of *Rumelia*, or *Greece*, who resides at *Sophia*, in *Bulgaria*. The second is that of *Gallipoli*, called *Capitan Bashaw*, or General of the Sea. The third is that of *Buda* in *Hungary*, where there are likewise those of *Kanise*, *Agria*, and *Temeswar*. The two others are those of *Bosnia*, and *Caffa*; the first resides at *Bagnaluka*, and the last at *Caffa*, in the *Turkish Chersonesus*.

Note again, That the People subject, or tributary to the Grand Seignior, are divided into three different Opinions, in Matter of Religion. The greatest Part follows the Schism of the *Greek* Church: The other profess the *Catholic* Religion, without making the least Mention of *Lutherans* or *Protestants*: And those particularly devoted to the Grand Seignior, follow the Doctrine of *Mahomet*. There is also found among them a great Number of *Jews*, particularly at *Constantinople*, and *Adrianople*. Before the Kings of *France* had made an Alliance with the *Turk*, the *Catholics* were cruelly persecuted in his Empire, and none but the *Christian Greeks* allow'd to profess publicly their Religion, in paying a Tribute. But ever since that Alliance, so advantageous to the *Roman* Church, for whose Interest the Most Christian Kings keep it so religiously, more than 100,000 *Catholics* live in Liberty of Conscience, in the Middle of the Dominions of the *Turk*, as if they were in *France*; have three Churches at *Constantinople*, eight at *Galata*, and more than four hundred others in several Places; with eight or nine Bishops at the Pope's Nomination.

ROMANIA.

This Part of *Turky*, once the Kingdom of *Thracia*, has been called *Romania*, ever since the Emperors of the East fix'd the Seat of their Empire in it, and *Constantinople* was called at the same Time, and for the same Reason, the *New Rome*.

It extends from the 49 Deg. 40 Min. of Longitude, to the 56. 30 Min. and from the 41. 10 Min. of Latitude, to the 44. 30 Min. so that it may have 100 Leagues in its greatest Extent from East to West, and 68 from South to North.

It confines Eastward with the *Black Sea*, the *Bosphorus*, the Sea of *Marmara*, and the Streight of *Gallipoli*, anciently *Helespontus*; Southward with the *Archipelago*; Westward, Part with *Macedonia*, and Part with *Bulgaria*; lastly, Northward with the *Mont Dorent*, anciently *Ilemus*, which parts it from *Bulgaria*.

Though it be in the Middle of the temperate Zone, the northern Winds which blow on the Side of the *Black Sea*, renders the Climate sometimes very cold. The Soil is fertile enough in Corn, Fruit, and Pasture; but Wine is pretty scarce in some Places. Some of its Mountains have Mines of Silver, Lead, and Allum, which are very considerable.

It has but one remarkable River, which is the *Mizza*; it takes its Source at the Foot of *Mont Rodope*, towards *Macedonia*, whence running from West to East, as far as *Adrianople*, it bends Southward, passing through *Trajanopoli*, and disembogues into the *Archipelago*. Five

Leagues off the Coast, is found the Lake *Bistogna*, which has near 25 Leagues of Circuit.

CONSTANTINOPLE, Capital of the whole Empire, is Capital of *Romania* in particular. — *ADRIANOPLE*, on the *Mezza*, is also very considerable.

Note, That the Inhabitants of *Romania*, are very much inclin'd to Hospitality.

Note also, That *Romania* is included in the Government of the *Beglerbeg* of *Rumelia*; and his sublime Highness keeps only *Cadis* for the Administration of Justice, in the principal Cities, as *Constantinople*, *Adrianople*, *Vizza*, &c.

Note again, That the Religion of the *Greeks* is the most profess'd in *Romania*, though they have Trouble enough to maintain themselves against the Persecution of the *Mahometans*, who are the strongest. The *Jews* have likewise more Liberty there than in any other Part of *Europe*.

G R E E C E.

GREECE, which is called by the Natives *Hillas*, and *Rumelia* by the *Turks*, was once the most flourishing Country of the whole Earth. It offers to us, as in Perspective, the Inconstancy of all created Beings: For that Country which was once a Nursery of Heroes, Politicians, Philosophers, &c. is at present the Country of Bondage and Slavery: Those famous Cities, where all Nations came to be civilized and instructed, where Arts and Sciences had been carried to a supreme Degree of Knowledge and Perfection, are at present so many Seats where Ignorance reigns with so absolute an Empire, that the Sovereigns themselves make of it a Maxim of State.

This Part of *Turky* extends between the 43 and 52 Degree of Longitude, and from the 34. 40 Min. of Latitude, to the 43. 20 Min. so that it may have in its greatest Extent from North to South, about 180 Leagues; from East to West near 125; sometimes 60, 40, &c. being very irregular.

Northward it is separated from the other Parts by a long Ridge of Mountains; on the three other Sides, it is all environed with Seas, viz. Eastward with the *White Sea*, or *Archipelago*; Southward with the *Mediterranean*; and Westward with the same Sea, the *Ionian*, and the *Adriatick*, or Gulph of *Venice*, as far as beyond the Gulph of *Catara*.

Its Climate is very temperate, and much more wholesome than that of *Romania*: Its Soil is very fertile in Corn, delicious Wines, and Fruits. It abounds in Cattle and Game, in a Word, in all Things necessary for Life.

It has a great Number of Rivers, which are no otherwise considerable than by their Names in antient History, and Fable; but it has several large Gulphs, which I have mention'd in my general Description of *Turky*.

The Mount *Oeta* divides it almost into two equal Parts, from North to South, throwing here and there several Arms, which have different Names. But to make a more particular Division of it, it must be observ'd that there are six principal Parts in *Greece*, which had all, not only every one their King, but some of them contain'd even several Kingdoms; as *Achaia*, *Peloponnesus*, &c. The greatest and first of those Parts is *Macedonia*, then *Thessalia*, both situated on the *White Sea*; afterwards *Albania* and *Epirus*, one on the Gulph of *Venice*, and the other on the *Ionian Sea*. *Achaia*, which is Southward of *Epirus*, and of *Thessalia*, is between this last Sea, and the *Archipelago*; and the *Peloponnesus*, or *Morea*, which is Southward of *Achaia*, from which it is separated by the Gulphs of *Lepante*, and *Angia*, is situated between the *Archipelago* and the *Mediterranean*.

MACEDONIA, the native Country of *Alexander the Great*, and once his hereditary Kingdom, is the greatest Province of *Greece*; what it has the most remarkable at present is, the Mount *Atbos*, commonly called *Monte Santo*, which advances as a Peninsula into the Sea, and on which there are 23 Monasteries of *Caloyers*, or *Greek*

Greek Monks, who cultivate the Land, and live of their Labours.

The most considerable City is *Theſſalonica*, ſituated at the Bottom of its Gulph, and which is the Seat of a *Sangiac*.

ALBANIA, which once made Part of *Macedonia*, was the Country of the great *Scanderbeg*, who gain'd twenty-two Battles againſt the *Turks*. There is a Thing practiſed worthy our Notice, in that Province: When a military Man dies, he is extended on a Carpet, his Arms near him; then all his Friends come to aſk him, why he has left them, and ſuffer'd himſelf to die, ſince he knew ſo well how to fight: If he be a private Gentleman, he is aſk'd why he died, ſince he had enough to live upon, and a Family who loved him ſo much.

ALESIO, at the Mouth of the *Drin*, paſſes for the moſt conſiderable City of *Albania*.

THESSALY, was the Country of *Achilles* and *Jaſon*. *Hercules* burnt himſelf there on the Mount *Æta*. *Cæſar* defeated *Pompey*, near *Pharſalia*, in this Province; and in the ſame Fields, *Auguſtus* vanquiſhed *Cæſius* and *Brutus*. It is ſaid, that the *Theſſalians* invented the Gold and Silver Coin; and were the firſt who put Bits to Horſes, to make uſe of them in Battle; which has given Occaſion to the Fable of the *Centaurs*, who are figur'd half Men, and half Horſes.

The moſt conſiderable City of *Theſſalia*, is *Lariſſa*, the native Place of *Achilles*, ſituated on the River *Peneæ*, by the *Turks* called *Aſaba*, towards the Gulph of *Theſſalonica*.

EPHROS, contain'd antiently the *Chaonia*, *Acarmania*, the Countries of the *Moleſſi*, *Dolopes*, *Hellopes*, *Dryopes*, *Selfi*, *Amphilocians*, and of ſeveral other People known in the antient Hiſtories, and in the Fable. It was antiently famous for the Oracle of *Dodoneæ*, render'd by two Doves perched on an Oak, near the Temple of *Jupiter*. It was in *Ephros*, near *Altium*, *Auguſtus* vanquiſh'd *Mark Antony*.

The City of *LAORTA*, on the Gulph of the ſame Name, antiently call'd *Ambracia*, is the moſt conſiderable of *Ephros*, and the Kings have often reſided there.

ACHAIA, which was call'd particularly *Greece*, is likewiſe nam'd *Livadia* by the Moderns. It includes Eaſtward, the *Bætia*, *Magarida*, and *Attica*, which is the Dutchy of *Athens*; in the Middle, the *Dorida*, and *Phocida*, in which was the famous Oracle of *Delphos*, the Mount *Helicon*, and the *Parnaffus*, where the *Muſes* uſed to aſſemble; Weſtward, the *Etolia* and *Locrides*, *Ajax's* Country.

The moſt famous Cities of that Province are *Athens*, at preſent *Setines*, Capital of *Attica*, ſo well known in Hiſtory for its Republick, and famous Academy; *Thebes*, at preſent *Stives*, Capital of *Bætia*, in which *Bacchus*, *Hercules*, and *Pindarus* were born; *Megara*, Capital of *Magarida*, the native Place of the ingenious *Euclid*, Inventor of the Elements of Mathematicks.

The *MORÆA*, or *Peloponneſus*, is a Peninſula, which has almoſt the Figure of a Vine-Leaf; join'd to *Achaia* by an Iſthmus only two Leagues broad: In this Peninſula is the River *Styx*, whoſe Water is mortal; which has given Room to Poets to ſay, that it was one of the Rivers which one was oblig'd to be ferry'd over to go into Hell; and that when one had once drank of that Water, he forgot all he had done in his Life-time.

The moſt conſiderable Cities, or rather the moſt famous, are *Corinth*, *Argos*, *Lacedæmon*, &c. *Corinth* had Inhabitants who were the moſt learned of all *Greece*, in Architecture and Sculpture: It had a Temple dedicated to *Venus*, in which lived more than 1000 Ladies of Pleaſure, extremely handſome, who were conſecrated to the Service of the Temple; but as no Body could divert himſelf with thoſe Ladies without vaſt Expence, hence came the Proverb, *Every Body is not allow'd to go to Corinth*. *Argos*, was the Capital of the Kingdom of *Agamemnon*, Chief of the other Kings of *Greece*, who went to the Siege of *Troy*. *Lacedæmon*, or *Sparta*, at preſent *Miſſtra*, is famous for its antient Republick, which ſubjugated almoſt all *Greece*. *Piſa*, on the River *Alphære*, is not known under that Name, but is famous by that of *Olympia*, becauſe of the Temple of *Jupiter Olympian*.

MODIN, ſituated toward one of the Extremities of *Morea*, is the Seat of a *Sangiac*, which is call'd *Morabegi*, and the firſt in Rank among the *Sangiacs* of *Europe*.

Note, That tho' I moſt commonly give the whole Deſcription of a Country, before I ſpeak of the Iſles: I judge it more proper to place here that of *Candia*, and of the other Iſles which depend of *Turky* in *Europe*, in the *Archipelago*, ſince they are ordinarily in the ſame Chart, rather than defer it till after the Deſcription of the other Parts which are Northward.

CANDIA.

The ISLE of *CANDIA*, antiently call'd the Kingdom of *Crete*, is famous under that Name in the Fable, for having been the Habitation of *Jupiter*; he brought *Europa* thither, whom he had ſtolen in *Phœnicia*, and that Charmer married afterward *Aſtorius* King of the Iſland.

It is ſituated under the 34 Degree of Latitude, and the 53 of Longitude, and may have 75 Leagues in its greateſt Extent from Eaſt to Weſt; 25 in its greateſt Breadth from South to North; 7 towards *Sfacbia*; and only 4 in its leſſer, which makes an Iſthmus between two Gulphs; and it may have about 170 Leagues of Circuit.

Its Climate is extremely wholeſome and temperate, and the Soil very fertile in Corn, Wines, Fruits, and Paſtures: If the Inhabitants were not lazy, they could make in ſeveral Places two Harveſts of Corn every Year; they are, otherwiſe, more addicted to the Culture of the Vine, which produces delicious Wines, red and white; they gather a great Quantity of Figs, Pomegranates, Oranges, and Citrons, ſome of which are as big as the Head of a Man; Laurels, and Myrtle-Trees, are as common in the Fields as Briars here. The Inhabitants make very good Oil, and very fine Salt: The Paſtures are always cover'd with innumerable Flocks of Oxen and Sheep; among which there are Rams which have their Horns ſtrait. Neither Harts, Wolves, Foxes, nor venomous Beaſts are ſeen there, except a Kind of Spiders, call'd *Phalangium*, whoſe Sting is mortal.

There are no navigable Rivers in *Candia*, but only large Brooks, as the *Almiro* and the *Iſtonia*; along which is found the Tree *Leandro*, the Wood and Leaves thereof is a Poiſon, which renders the Water very dangerous in Summer.

Among its Mountains is ſeen that of *Pſiloriti*, call'd antiently Mount *Ida*, like that of *Troades*.

Note, That the *Candiots* are very unpoliſh'd, lazy, and Epicures to Exceſs: They are brutiſh in their Paſſions, imitating *Jupiter* their antient King, who left all the fair Ladies to keep near him his *Ganimedes*.

Note alſo, That the Iſland of *Candia* had antiently its particular Kings; then was govern'd in Form of a Republick, which was the beſt civiliz'd of its Time. *Quintus Metellus*, *Pompey's* Lieutenant, conquer'd it for the Romans; afterwards it came into the Power of the Emperors of the Eaſt; then it was given to the Duke of *Montferrat*, who ſold it to the *Venetians* in 1494; who poſſeſs'd it, till the *Turks* made themſelves Maſters of it in taking the City of *Candia*, its Capital, after a very long Siege. It is a Place very well fortified, ſituated on the northern Coaſt, and the Grand Seignior keeps in it a *Sangiac*, for the Government of the Iſland.

Note again, That ever ſince the *Venetians* have loſt this Iſland, there are few others but *Chriſtian Greeks*, and *Mahometans* found in it.

NEGREPONT.

The Iſland of *NEGREPONT*, call'd alſo *Eubœæ*, and *Egripos*, by the *Turks*, was antiently call'd *Hellopia*, of the Name of its People; *Chalcis*, of that of its capital City; and *Macra*, becauſe it is long and narrow. It was antiently a Peninſula, which made Part of *Bætia*, to which it was join'd by a very narrow Iſthmus, which was broken by the Violence of the Ebbing and Flowing of the Sea, which happens there ſeven Times in twenty-four

four Hours; for which no pertinent Reason could be given yet. This Prodigy serv'd a long while for Subject of Meditation to *Aristotle*, and accelerated his Death, according to the Sentiment of some Authors; but not by precipitating himself into it, as falsely imagin'd by others.

This Isle is situated in the *Archipelago*, at North by East of *Achaia*, from which it is separated by a Streight call'd *Euripe*. It is contained between the 49 and 52 Deg. of Longitude, under 38 Deg. 30 Min. of Latitude, and extends from South by East to North by West, about 50 Leagues; having 10 or 12 in Breadth, and about 120 of Circuit.

Though it be very subject to Earthquakes, it is notwithstanding fertile enough in Corn, Wine, and Oil.

Note, That this Island was for a considerable Time in the Power of the Emperors of the East; then the *Venetians* possess'd it till *Mahomet II.* conquer'd it in 1470, causing all the Males above twelve Years of Age to be put to Death.

Note also, That before the Coming of the *Turks* in this Island, the Inhabitants were part *Roman* Catholics, and part *Greeks*; but ever since that Time, the last are the only *Christians* to be met with in it.

The City of *Nagrepont*, antiently call'd *Chalcis*, is the Capital of the Isle. It is situated on the Coast over-against *Bœtia*, with which it has Communication by means of a Bridge, made in the same Place where the Isthmus was.

Note, That I'll content myself with inserting, in my particular Description, the other Isles in the *Archipelago*, of the Dependencies of *Greece*, because they have nothing deserving our Notice. Their antient Names, which are famous in History, and in the *Metamorphoses*, being at present so much chang'd, or at least disfigur'd, that they are hardly known.

A more particular Description of *Turky* in *Europe*, is as follows:

ROMANIA, or THRACE, contains *Constantinople*, *Galata*, *Seliorœa*, *Chiorli*, *Bergas*, *Adrianople*, *Philippopolis*, *Zarnis*, *Bra*, *Nicopoli*, *Maximianopoli*, *Bistogna*, *Marogna*, *Abdera*, *Enos*, *Trajanopoli*, *Caridia*, *Gallipoli*, *Seftos*, *Mecha-nova*, *Rudisto*, *Malatia*, *Stagnata*, *Sisopoli*.

The Island of CANDIA, contains *Candia*, *Canœa*, *Retimo*, *Silia*, *Suda*, *Spina-longa*, *Paleo-Castro*, *Schino*.

The Island of NEGREPONT, contains *Negrepont*, *Protemo*, *Gerelto*, *Caristo*.

Isles of STALIMENE, *Tasso*, *Seyro*, *Dromo*, *Andro*, *Nicfia*, *Paro*, *Morgo*, *Stampalia*, *Sifano*, *Milo*, *Cerigo*.

GREECE.

MACEDONIA, contains *Theffalonica*, *Zucaria*, *Empoli*, *Liba-nova*, *Cavalla*, *Philippi*, *Siderocapsa*, *Ajomana*, *Berrœa*.

THESSALIA, contains *Larissa*, *Coniga*, *Tricala*, *Demetrinda*, *Armiro*, *Pharsalia*.

ACHAIA, contains *Seuines*, *Stivis*, *Aulis*, *Marathon*, *Megara*, *Delphos*, *Lepanthe*, *Galato*, *Santa-Maura*.

ALBANIA, contains *Aleosio*, *Scutari*, *Croya*, *Aniivari*, *Thermidava*, *Locrida*, *Albanopoli*, *Valona*, *Avostoma*.

EPIRUS, contains *Larta*, *Previza*, *Bastia*, *Orchino*, *Argiro*, *Elatria*.

The MORÆA, contains *Modon*, *Corinth*, *Patras*, *Misistra*, *Argos*, *Coron*, *Arcadia*, *Pisa*, *Tornefe*.

BULGARIA, and SERVIA.

These two Provinces contain the Country antiently call'd *Mœsia*, except that it advances less towards the *Levant*; but the Country of the *Tartares Dobruſe*, being join'd to the first, makes it to extend as far as the *Black Sea*; so that these two Provinces take up a Space which has near 180 Leagues of Extent from East to West, from the Coasts of that Sea to the River *Drine*, which separates *Servia* from *Bosnia*; and extends in Breadth between the *Danube*, with which they confine Northward, and the Mountains which separate them Southward from *Romania*, and *Greece*, sometimes of 25 Leagues of 30, and even of 50, towards the *Nissawa*, which runs in *Servia*.

The Climate is very temperate, the Soil agreeable enough, being diversified with Mountains and Plains: It is very fertile, but it remains very often uncultivated, because the *Turks* ravish from the poor Country People, the Fruit of their Labour and Industry: Notwithstanding which one may live very cheap in that Country, because they have Abundance of Cattle and Fowls; but the Bread is very disagreeable, because often bak'd under the Ashes.

The most remarkable Rivers of those Provinces are the *Save*, which receives the *Drine*; the *Morave*, which receives the *Nissawa*; the *Iska*, &c. which all disem-bogue into the *Danube*, which serve for Bounds to the whole Country Northward.

Note, That the People, particularly the *Servians*, are cruel, Thieves, and Drunkards; they steal Children, whom they sell impudently to the *Turks*, for infamous Uses: The *Bulgarians* are more human; and both are very courageous.

Note also, That these Provinces had once their Kings, or particular Princes, who were very powerful: Those of *Servia* were call'd *Despote*, and the last was *Stephen*, who was also *Despote*, or King of *Bosnia*. *Mahomet II.* after he had debauched his Wife, surprized him, and had him put to Death: By that Means the *Barbarian* Emperor became Master of those Provinces, which depend at present of the *Beglerbeg* of *Rumelia*.

The City of SOPHY, is the Capital of *Bulgaria*: It is situated in a large Plain, on the Road from *Constantinople* to *Vienna*.

SAMANDRIA, was once the Capital of *Servia*, but it is at present half ruined; and BELGRADE, on the *Danube*, passes for the Capital of that Province.

Note, That the Inhabitants of the Cities follow most of them the Religion of the *Greeks*: The *Mahometans*, who are in a very small Number, live in the Boroughs and Villages: The *Catholics*, who may be to the Number of 25 or 30,000, are very miserable: And the *Jews*, who ingross to themselves the whole Commerce of the Country, have several Synagogues in it.

A more particular Description of *Bulgaria*, and *Servia*, is as follows:

BULGARIA, contains *Sophia*, *Dragoman*, *Jetiman*, *Biltz*, *Silistry*, *Nigeboli*, *Tirnova*, *Rasgrad*, *Rossi*, *Pasargia*, *Tatracan*, *Doroſtero*, *Axiopoli*, *Dionisiopoli*, *Provas*, *Mesembria*, *Varne*, *Cavarne*, *Momgalia*, *Minſtenge*, *Tomi*, *Drimago*, *Croſone*.

SERVIA, contains *Belgrade*, *Sabatze*, *Orach*, *Belina*, *Zenobicz*, *Fochia*, *Janisabar*, *Priſtino*, *Novobardo*, *Siabrinno*, *Stratoria*, *Santofaba*, *Nice*, *Precopia*, *Crattovo*, *Yagodna*, *Semandria*, *Colubas*, *Novigrad*, *Festlan*, *Viddina*, *Chiprovax*, *Bercoviza*, *Pirot*.

BOSNIA, ESCLAVONIA, CROATIA, and DALMATIA.

These Provinces was antiently comprised under the sole Name of *Illyria*, call'd since *Sclavonia*.

They take up the Extent of Country which is from the Frontiers of *Carniole*, towards 38 Deg. 30 Min. of Longitude, as far as to 44 Deg. and from the 42 Deg. 40 Min. of Latitude, to 46 Deg. 40 Min. has in its greatest Length, from East to West, about 80 Leagues; and 65 from South to North.

They confine Northward with *Hungary*; Eastward with *Servia*, and *Albania*; Southward with the Gulph of *Venice*; Westward with *Carniole*, and the County of *Cilly*.

The Climate is mild, and temperate; the Soil, tho' full of Mountains, very fertile in Corn, Wine, Fruits, and Pasture, where is fed a great Number of Cattle, but those very lean. Mines of Gold, Silver, and other Metals, are found in them.

The most considerable Rivers of these Provinces are the *Drave*, the *Save*, the *Drine*, the *Bosſena*, or *Bosna*, the *Unna*, and the *Kulp*.

Though Authors have spoke variously of the Division of these Provinces; to follow the most modern Opinion, I'll say that *Bosnia* is Eastward, or rather in the Middle, in

in the Neighbourhood of the River *Bosna*, between the *Save* and *Dalmatia*; *Esclavonia* is Northward between the *Drave* and the *Save*; *Croatia* is Westward, in the Neighbourhood of the *Unne* and *Kulp*; and *Dalmatia* is Southward along the Gulph of *Venice*, containing in its Extent the Territories of the Republick of *Ragusa*.

When *Bosnia* had its own particular Kings, *Jayla* was their Place of Residence; but at present the Capital of that Province is *Bosne-Serayo*, situated on the River of the same Name, tho' the *Beglierbeg* resides commonly at *Bagnaluca*, Frontier of *Dalmatia*.

POSEGA, is the most considerable of the Cities, the Grand Seignior is Master of in *Esclavonia*, and is the Capital of a County.

WIHITZ, or BIGIHON, is the Capital of those he holds in *Croatia*; and *Scardona* was the most remarkable of those he holds in *Dalmatia*, but it is at present almost ruined.

RAGUSA, an Archiepiscopal City, is the Capital of its Republick; the *Turks* call it *Dobronissa*, and it passes for the richest, most trading, and best peopled of those Parts.

Note, That all the People of those Provinces, are naturally warlike; but most of them are addicted to Thieving and Drinking.

Note also, That *Bosnia*, as I have already observ'd, had antiently its own Kings, or *Despotes*, besides the *Beglierbeg* of *Bosnia*, and the *Sangiacks*, who govern all the Grand Seignior possels in those Parts; the *Venetians*, who are Masters of almost all the Coasts of *Dalmatia*, keep in it a general Proveditor, and other Officers. The Republick of *Ragusa*, which is tributary of the *Turk*, is govern'd by its Rector, who is changed every Month.

Note again, That the *Catholick* Religion is the most followed in those Provinces. The *Greeks* and *Mahometans* have also their Partisans, and there is a Liberty of Conscience for every Body.

A more particular Description of those Provinces is as follows:

BOSNIA, contains *Bosnia-Serayo*, *Zunick*, *Jadra*, *Quornick*, *Uranduck*, *Bragnaluca*, *Jaicza*, *Tinina*, *Zelinaza*, *Verbofania*, *Cernirza*, *Ternovizza*.

The *Turkish* ESCLAVONIA, contains *Posega*, *Dowabacz*, *Geradiskia*, *Jassenocz*, *Sopplonka*, *Soppia*, *Zanko*, *Valkowar*, *Ponmonster*, *Petrovitza*, *Ratcha*.

The *Turkish* CROATIA, contains *Wibits*, *Castonovitz*, *Uduina*, *Lira*, *Dublicza*, *Nowogradeck*, *Dobranim*, *Kamengrad*, *Sternizza*, *Obroazo*, *Suonigrad*.

The *Turkish* DALMATIA, contains *Scardone*, *Sdrigna*, *La Uragna*, *Sfigna*, *Mostar*, *Narenza*, *Antivari*, *Trebigna*, *Dulcigno*.

The Republick of RAGUSA, contains *Regusa*, Arch. *Stagno*, *Sabioncello*.

Turkish HUNGARY.

This Part of *Hungary*, which I call *Turkish* or *Mahometan*, is the whole Extent the Grand Seignior possels in that Kingdom, which includes almost all that's called *Lower Hungary*, except the most western Part, which belongs to the Queen of *Hungary*.

It extends at present from the Confluent of the *Save* with the *Danube*, about the 45 Deg. 20 Min. of Latitude, to the 48. Its greatest Length is from *Kanise*, under the 39 Deg. 30 Min. of Longitude, to the 46. 30 Min. toward *Valachia*; so that this Part, which is the Heart of *Hungary*, has very near 110 Leagues in its greatest Extent from East to West; and more than 50 from South to North.

It confines Eastward with *Transilvania*; Southward with *Servia*, and *Esclavonia*; Westward with the *Christian Hungary*, by a Line drawn from the Lake *Balaton*, to *Neubausel*; and again Northward by another Line drawn from the same City to *Agria*, and from thence to *Waradin* in *Transilvania*.

I have observed already that the Climate of *Hungary* is unwholsome, particularly in this Part. The Waters

are very bad to drink, so that Foreigners never fail falling sick, and be presently full of a Vermin peculiar to that Country.

The Soil is very fertile in Wheat, delicious Wines; and Pasture. It abounds in Cattle, especially Oxen. Harts, wild Boars, Hares, Pheasants, Partridges, and all Sorts of Game, are so common there, that the Peasants make their common Meals of it. It has so great a Plenty of Fish, particularly in the *Teifs*, that 1000 Carps are sold for a Ducat, which is about four Shillings of *English* Money; and sometimes the Fishermen are forc'd to throw them back into the Water, or to give them to Hogs which are fatten'd with them. Mines of Gold, Silver, Copper, Iron, Antimony, &c. are found in it; in a Word, it is one of the most fertile Countries of *Europe*.

The most remarkable of its Rivers are the *Danube*, the *Save*, the *Marish*, *Teifs*, or *Tibisc*, *Sawisch*, *Temes*, &c.

The *Turkish Hungary*, is divided into four *Beglierbywicks*: The first is that of *Buda*, which is the biggest: The second that of *Temeswar*, Eastward: The others are of a still lesser Extent than this, which are that of *Kanise*, Westward; and that of *Agria*, Northward.

BUDA, or OFFEN, on the *Danube*; TEMESWAR, on the *Temes*; KANISE, near the *Sale*; and AGRIA, on the *Eger*, are the Capitals of their *Beglierbywicks*.

Note, That besides the *Beglierbegs*, appointed for the Government of these Provinces, there are *Moulacadis* in the great Cities, and *Cadis* in the lesser, who are above the *Sangiacks* for the Administration of Justice. There is besides a *Tefftadar* in each Province, who is like a *Custos Rotulorum* in *England*. These Officers; and some others of the same Sort, compose the *Divan*, or Council, in which are determin'd all the Affairs of the Province, where the *Beglerberg* presides.

Note also, That the *Catholick* Religion is profess'd publicly in the *Turkish Hungary*, and that but very few *Greeks* are found in it; but there are *Lutherans* and *Calvinists* who pass among the *Catholicks* under the Name of *Christians*, most of those in the Government, and all the Soldiers are *Mahometans*. The *Jews* have also some Synagogues, particularly in the Royal Cities.

The Countries tributary of the Turk.

The Countries included between the *Danube* and the *Niefter*, from the Kingdom of *Hungary* to the *Black Sea*, were known antiently under the Name of *Dacia*; therefore it included *Transilvania*, *Valachia*, *Moldavia*, and *Bessarabia*.

These Provinces were a long while subject to the Kings of *Hungary*, and to those of *Poland*, who used to send thither, *Vaivodes*, i. e. Governors, or Viceroys. But these *Vaivodes* having revolted against their Sovereigns, and being not strong enough to maintain a War against them, were forced to put themselves under the Protection of the *Turk*, and become his tributary; so that at present he uses them as he pleases.

V A L A C H I A.

This Province was antiently called *Flaccia*, of the Name of *Flaccus*, sent into it by the Emperor *Trajan*, with a Colony of 30,000 Men to till the Ground. It used to furnish the *Roman* Army with a great Quantity of Provision, during the War against the *Scythians* and *Sarmatians*.

It extends from East to West more than 90 Leagues, and from South to North more than 50; but not every where, because its Figure is very near that of a spherical Triangle.

It confines Northward with *Moldavia*; Southward and Eastward with the *Danube*; and Westward with *Transilvania*.

The Climate is very temperate; the Soil abounds in Corn, Wine, Fruit, and all that's necessary for Life. It has in several Parts very thick Forests; it feeds a great Quantity of fine Horses, Oxen, and Sheep, which are sent in great Flocks to most Parts of *Europe*. It has Mines of all Sorts of Metals; and the Inhabitants

carry on a great Commerce of Leather with *Muscovy*, and *Poland*.

Its principal Rivers are the *Aluta*, *Telesch*, *Jalonicza*, and *Missovo*, which run of a Course almost parallel, to disembugue afterwards into the *Danubs*.

Note, That the *Valachians* are govern'd by a *Vaivode*, whom the Grand Seignior chuses, or accepts, if he pleases him; but whom he deposes when he suspects him.

The City of *Tergowisk*, situated on the River *Jalonicza*, is the Capital of the Province, and the Seat of the *Vaivode*.

Note, That the Inhabitants profess the *Greek Religion*, and acknowledge the Patriarch of *Constantinople*.

M O L D A V I A.

This Province borrows its Name from one of its Rivers. It extends from East to West more than 90 Leagues, and from South to North about 70.

It confines Northward with the *Niester*, which parts it from *Podolia*; Eastward with the *Black Sea*, and the *Danube*; Southward with the same River, and the *Serib*, or *Missovo*; and Westward with *Valachia* and *Transilvania*, from which it is separated by the Mount *Hemus*.

The Climate is very wholesome, and the Soil fertile in all that one can desire. It feeds the finest and best Horses of *Europe*; its Plains are diversified with Mountains, Valleys, and Rivers, which render the Province very agreeable. The Soil of *Bessarabia* is very marshy, tho' very well inhabited.

The most remarkable of its Rivers are the *Pruth*, the *Missovo* which receives the *Bardalack*, and disembugues like the first into the *Danube*, which confines with that Province at South by East, and passes in *Bessarabia*, where are all its Mouths.

MOLDAVIA is divided into two Parts, the most considerable thereof, which is Westward, retains the same Name; and the other, which is not a Quarter so large, is called *Bessarabia*.

Note, That *Moldavia* is govern'd by a *Vaivode*, who is tributary of the *Turk*; *Bessarabia*, inhabited by the *Tartars* of *Bugiac*, are entirely under his Domination.

The City of *Sockow*, is the Capital of this Province, and the Seat of the *Vaivode*, who styles himself Lord of *Moldavia*. It is situated Northward on the River *Sereth*.

Note, That the *Moldavians* are like the *Valachians*, *Christians* after the Manner of the *Greeks*.

L I T T L E T A R T A R Y.

This Country called *Little Tartary*, contains what was antiently called *Little Scythia*, which was inhabited by the *Tauro Scythians*, the *Nomades*, *Tanaites*, and several other People. It is called *Little Tartary* to distinguish it from the *Great*, which is in *Asia*, whence came the People who inhabit it at present.

It extends between the 57 and 75 Deg. of Longitude, from the 47 Deg. of Latitude (the Peninsula of *Crimæa* included) to the 53; so that it has more than 300 Leagues from South by West, to North by East; 40 or 50 from North to South, without including the *Crim*, which may have 48 Leagues besides on the same Side, and about 70 from East to West.

It is comprised between the *Nieper*, and little *Don*, which separates it in Part from *Muscovy*, with which it confines Northward and Eastward; Southward with the *Tanais*, or *Great Don*, the Sea *Delle Zabach*, and the *Black Sea*; and Westward with the *Nieper*, and the Mountains, which part it from *Poland*.

The Climate of this Country, tho' temperate enough, is not very wholesome. The Soil is very extraordinary in its Qualities, considering its small Extent; for in some Places it is fertile in Corn, Millet, Wine, and Fruit; in others very marshy, and full of Pastures, which feed a great Number of Cattle; and in others it is uncultivated, and full of Sand. Wood is very scarce,

except in the Peninsula, where are found fine Forests, full of Deers, wild Boars, Hares, and other Game. Its Mountains have Mines of Gold, Silver, and Iron: Its Rivers full of delicious Fish, tho' the Waters are bitter, and not good to drink.

The most considerable of its Rivers, are the *Nieper*, or *Boristhenes*, and the *Great* and *Little Don*.

This Country is divided, as I have already observed, into two Parts, one whereof is Northward, between the *Nieper*, and the *Little Don*; the other is the Peninsula, called *Krimæa*. The first is almost desert, being inhabited but by the *Tartars Nagais*, who build their Houses, or Huts, in the Places which they judge most commodious; so that very few Cities are found in it, except towards the Coasts of the *Black Sea*, and that of *Della Jabache*. The *Krimæa*, called antiently *Taurick Cherfonesus*, is far better inhabited, and contains several pretty large Cities. The Inhabitants dug once a very deep Ditch on the Isthmus, which joins it to the Main Land, whence it was called *Præcop*, in the Language of the Country.

Note, That the Inhabitants of this Country are very strong, and capable to support Hunger, Thirst, and all Sorts of Fatigues. They are free, and sincere among themselves; but thievish, and cruel towards Foreigners, particularly their Enemies: They are jealous to Extravagancy, and lewd to Excess. They eat commonly Horse Flesh, half raw, and often to bake it in their Manner, they put it by Pieces under the Saddle of their Horses, which they spur on till they be all in a Sweat, then they leave it for some Time to stew, after the Horse is stopp'd, they take it out and eat it. They also drink the Blood of their Horses, and the Milk of their Mares. They are very courageous, and love nothing more than War.

Note also, That the *Little Tartary* is govern'd by an Emperor, commonly called *Cham*. He is under the Protection of the Grand Seignior, who sends him a Standard for a Mark of his Sovereignty. During the Reign of a *Cham*, his sublime Highness keeps, as in Hostage, him who is to succeed, whom they call *Galga*, and who is commonly the Son, or Brother of the *Cham*. The *Turk* possesses Part of the *Krimæa*, where he keeps a Beglerbeg, in the City of *Cassa*, which is the most important Place of that Province. He holds, besides, that Part of *Podolia*, or *Ukrania*, which is between the *Bessarabia*, and *Boristhenes*, and inhabited by the *Tartars* of *Oczakow*. He is Master of the City of *Azoph*, or *Tane*, situated in an Island made by the *Don*, near its Mouth; and that of *Thamin*, situated in *Asia* on the Streight of *Cassa*. These two Cities are of great Importance, and have each a Sangiack, depending of the Beglerbeg of *Cassa*.

The Capital of *Little Tartary*, is *CRIM*, from which the Peninsula in which it is situated, borrows its Name. The *Cham* resides either there, or at *Bacca-Serayo*, situated in the Middle of the *Krimæa*. *Cassa*, where the Beglerbeg resides, is situated on the eastern Coast, bathed by the *Black Sea*.

Note, That most of the *Little Tartars* follow the Dreams of *Mahomet*. There are found among them several *Greek Christians*, and *Armenians*, who have their Metropolitan, and particular Churches; also a great Number of *Catholics*, who are of *Italian* Origin.

A more particular Description of all these Provinces, is as follows:

The *Turkish HUNGARY*, (between the *Danube*, and the *Drave*) contains *Buda*, Beg. *Vicegrad*, *Strigonia*, *Albe Royal*, *Vaxxon*, *Kapusk*, *Kanise*, Beg. *Zerdabet*, *Zigeth*, *Ozora*, *Cinq Eglises*, *Mohacz*.

Between the *DANUBE* and the *TIBISC*, *Agria*, Beg. *Nana*, *Novigrad*, *Newboursel*, *Vacia*, *Katha*, *Zolnock*, *Colocza*, *Bathmunster*, *Saged*, *Batha*, *Pesth*.

Between the *TIBISC* and the *MARISCH*, *Czongrad*, *Beckim*, *Turtur*, *S. André*, *Giula*, *Warsan*, *S. Job*, *Naz*, *Danbachaz*, *Silmos*, *Ostroido*.

Between the *MARISCH* and the *DANUBE*, *Temeswaer*, Beg.

Beg. *Gala, Chonad, Sarad, Lippa, Sidowar, Mogsanit, Haran, Karansebes, Mesofanlo, Ersanlo, Zeverin, Butozin, Beczkerk.*

WALACHIA, contains *Tergowisk, Braskow, Brailow, Olten, Jalonicza, Dembronitza, Arsim, Orsova.*

The LITTLE TARTARY, contains *Asoph, Manitz, Monaster, Stekoluk, Sternitza, Oczakow, Korkuby.*

The CRIMEA, contains *Crim, Bacca-Sarayo, Precop, Manseup, Kercy, Caffa, Beg. Balaclava.*

In ASIA, *Thaman, Temroch.*

Note, That from Europe, I'll pass into Asia, which is the most Eastern, and the most extended of the Parts the antient World, or our Continent, is compos'd of; chosen by a special Favour, by the Author of Nature, for the Creation of the first Man. It has been the Laboratory (if I may use that Expression) where he has formed all his other Works: It has the Advantage of having served as a sacred Temple, where the Almighty has pronounced his Oracles: It has furnish'd the Matter on, which he himself printed the sacred Characters of his divine Commandments, to give them to Moses: And it had the Glory to witness the Birth of the Saviour of the World; to have possessed his divine Presence during the whole Course of his mortal Life; having been as a new Temple, where he has accomplish'd the Mysteries of our Redemption, after he had instituted those of the true Religion.

I'll say more, that it is from *Asia* all the Colonies which have peopled the other Parts of the World have been taken; that it has been the Seat of the most antient and most powerful Monarchies of the Earth: For after the Deluge, it saw the Beginning of the Empire of the *Assyrians* by *Belus*, or *Ninus*, which continued as far as *Sardanapalus*: It passed afterwards to the *Medes* by *Arbaces*, as far as *Astyages*; to the *Persians* by *Cyrus*, as far as *Darius*; and to the *Greeks* by *Alexander the Great*. The *Parthians* established there likewise a very flourishing Empire, which ended under *Alexander Severus*, and passed to the *Persians*, till it was swallow'd by the *Turks* and *Saracens*.

Note also, That Christianity, Mahometanism, and Paganism, are the three reigning Religions in Asia.—Christianity, is divided into eleven Sects, which the Catholick Church call Schismatical; viz. 1. Of the Greeks; 2. Of the Russians; 3. Of the Georgians; 4. Of the Syrians; 5. Of the Jacobites; 6. Of the Armenians; 7. Of the Nestorians; 8. Of the Cophts, or Egyptians; 9. Of the Abyssines, or Abyssinians; 10. Of the Maronites; and 11. Of St. Thomas: These two last acknowledge, at present, the Roman Church.—The Greek, is the Religion of the Natives of Part of Turkey in Asia, whose Patriarch is that of Constantinople.—The Russian, is professed in the Dependencies of that Empire, whose Patriarch resides at Moscow.—The Georgian, is the Religion of the People of Mingrelia, who have their own Patriarch.—The Syrian, extends in Syria, or Seristan, which is a Province of Turkey in Asia, whose Patriarch is that of Antioch, residing at Damascus.—That of the Jacobites is in the Diarbeck, or Mesopotamia, and in the Holy Land, under two Patriarchs; one residing at Caracmid, who styles himself Patriarch of Antioch; and the other at Jerusalem, for the Holy Land.—That of the Armenians, is professed in both Armenia's, under two Patriarchs, one for the great, and the other for the little Armenia.—That of the Cophts, is in Egypt, whose Patriarch is that of Alexandria, residing at Cairo.—That of the Abyssines, is that of the Dependencies of the Empire of the same Name.—That of the Nestorians, extends in the Erzerum, or Assyria, in the Diarbeck, the Gerack, or antient Chaldaea, and in some Provinces of Persia, under the Patriarch of Mosul, which is the antient Nineveh; this Sect was once the most extended. Among all these Schismatical Sects, there are but the Russian, Abyssinian, and Georgian, which are professed by Sovereign Princes; the others being most of them subject to the Mahometan Princes, in whose Dominions they are professed.

The Mahometanism in Asia, is almost the sole Religion

of Arabia; and is the reigning one of Turkey in Asia, of Persia, of the Mogul, of the western Parts of the great Tartary, of the northern Part of the Peninsula of India, this Side the River Ganges, of the Maldivé Islands, and of most of the Isles of Sunda, and of the Molucca's.

Among the Pagan Sects, that of the *Parfis* was antiently the reigning Religion of Persia; but ever since Mahometanism has gain'd the Ascendancy, there are but few of the Natives who profess it, some of whom have settled on the Coasts of the Mogul, near Persia, and in some Places of the Peninsula of India, this Side the River Ganges.—The Religion of the *Brachmans*, was once the only one of all *Indostan*, and of the Peninsula, this Side the River Ganges; and since Mahometanism has been established in those Countries, it is yet the most followed Religion, and most general of the Natives of the Dominions of the Mogul, and of the Mahometan States of the Peninsula of India, this Side Ganges; is the reigning one in the other Dominions of the same Peninsula, and in those of the *Rayas* of *Indostan*, who have maintain'd themselves against the Mogul.—The Religion of *Jukiao*, is the particular Religion of Men of Letters in China, and that of the Court.—The Religion of the *Lamas*, is also professed no where but in China.—That of the *Lamas*, which has some Remains of Christianity, is the Religion of all the Regions of Tartary, near China, as of the *Thibet*, of *Tangu*, *Kin*, and has been introduced in China by the Conquest the *Tartars* have made of that Country.—Judaism is also professed throughout all Asia, but is subject to the three others abovementioned.

Note again, That Asia has six general Languages, and five particular Ones.

Among the general Languages, three are natural to it, viz. the *Arabick*, *Tartarian*, and *Chinese*; and three foreign, which it borrows from Europe, viz. the *Greek*, *Latin*, and *Teutonic*.

The five particular Languages, are the *Japanese*, the *Armenian*, the *Guzarate*, *Malabar*, and *Malayan*.—The *Japanese* is the only one of the Inhabitants of Japan, without any Mixture of foreign Languages.—The *Armenian*, is very much in Use for the Commerce in Turkey, and Persia.—The *Guzarate*, *Malabar*, and *Malayan*, have their Course on the Coasts of India, and in the neighbouring Islands; particularly the *Malayan*, which is esteemed the most beautiful and elegant of the *East-India*.

A S I A.

ASIA, extends from the 64 Degree of Longitude, at the Isthmus of *Sues*, as far as the 184, or 194, according to the modern Geographers; and from the first Degree of Latitude, to the 7½, without including the Isles depending thereof; and which extends, Southward, as far as to the 11 Degree of meridional Latitude; so that it has, from East to West, 2120 Leagues; and in its greatest Extent, from South to North, about 1400 Leagues: Whereby it is seen, that it takes up a great Part of the *Torrid Zone*, all the *Northern Temperate*, and advances five Degrees in the *Frigid*.

It confines Northward with the *Northern Ocean*; Eastward with the Sea of the *Kaimachites*, and that of *China*; Southward with the *Indian*, and *Arabian Sea*; and Westward with the *Red Sea*, the Isthmus of *Sues*, the *Archipelago*, the Sea of *Marmara*, the *Black Sea*, the Sea of *Delle Zabach*, with Part of the *Don*, and a Line drawn from its most eastern Curvature to the Gulph, which is between the Mouth of the River *Oby*, and the Streight of *Weigatz*, in the *Icy Sea*.

I'll divide Asia into six principal Parts, which are Turkey in Asia, Persia, India, China, Great Tartary, and the Isles depending thereof: The first four are found Southward, in this Order, going from West to East; the fifth is situated Northward of them; and the Isles are dispersed in the Ocean, into five principal Cantons, viz. the Isles of Japan, the *Philippine* Isles, the *Molucca's*,

Iucca's, the Isles of *Sunda*, and the *Maldives*; to which I'll add the Isle of *Ceylon*.

TURKEY in ASIA.

This State contains the whole Tract of Land, which the Grand Seignior possesses in that Part of the World.

It extends from 12 Deg. 30 Min. of Latitude, to the 45; and from 55 of Longitude, to the 95: So that it takes up about 325 Leagues from South to North; and more than 450 in its greatest Extent from East to West, either in the Northern or Southern Part.

It confines Northward with the *Black Sea*, and *Georgia*; Eastward with *Persia*, and the Gulph of *Ormus*; Southward with the *Arabian Sea*, and the Streight of *Babelmandel*; and Westward with the *Red Sea*, the Isthmus of *Suez*, the *Mediterranean*, the *Archipelago*, and the Sea of *Marmara*.

Neither the Climate, nor the Soil, are of an equal Temperature; for in the northern Part, which contains *Natolia*, *Souria*, *Diarbekir*, *Armenia*, or *Turcomania*, and some Part of *Georgia*; the Climate is very temperate, and the Soil produces all that's necessary for Life, as Wheat, Barley, Fruits, Cotton, and in some Places excellent Wines, and Saffron in Abundance. It has very fine Pastures, which feed a great Number of Horses, and white Goats, whose Hairs are as soft as Silk. Mines of Silver, Copper, Iron, and Allum, are found in it; also Crystal, Orpiment, and the Loadstone, from which the City of *Magnesia* has borrow'd its Name. In its southern Part (including the two *Arabia's*, though the *Turk* possesses but a small Part of them) the Climate is sometimes so excessive hot, that if it was not for the Dew, which falls every Night, and temperates the Heat, it would be almost insupportable: The greatest Part of the Soil is sandy, uncultivated, and that which produces enough to supply the Wants of the Inhabitants, except in the Neighbourhood of Rivers which are very scarce, and towards the Sea, where it is less sterile, it produces Barley, Oranges, Lemons, Pears, Apples, &c. It abounds with Honey and Wax, with Palm-Trees which bear Dates, and others which produce Cassia, Cinnamon, Olibanum, Myrrh, and other Aromaticks; very good Horses are found in it, and large Sheep, whose Tail often weighs 25 Pounds; beautiful oriental Pearls are fished on the Coasts of the Gulph of *Balfora*, particularly in the Neighbourhood of the Island *Baburin*, and Coral in several Places. It is supposed to have Mines of Gold, because the *Magi* came to offer some to *Jesus Christ*, a little after his Birth.

The most remarkable of its Rivers are the *Tygris*, and *Euphrates*, so famous in the sacred Scripture, which are both in the Mount *Ararat* in *Armenia*; the last runs first from East to West; then after it has passed through the City of *Erzerum*, turns its Course Southward, parting *Natolia* from *Armenia*, and *Souria* from *Diarbeck*, after it has join'd the *Tygris* below *Bagdad*; then having ran together 40 or 50 Leagues, they must part, according to the Description given in the sacred Text, which places the Garden of *Eden* Eastward of the common Canal of those two Rivers.

Note, That the Inhabitants of the northern Part are rough, ignorant, and lazy; loving nothing but good Cheer, and sensual Pleasures, which they search among both Sexes indifferently; they are extremely jealous of their Wives, and cruel to their Slaves; The *Arabians* are ingenious, industrious, and crafty; they cultivate the Land, and feed a great Number of Cattle and Camels, but they are great Thieves; and Travellers are obliged to march always in a numerous Company for fear of being plunder'd.

Note also, That the Grand Seignior governs the greatest Part of these Countries, by Means of his Beglerbeks, who have under them several Sangiacks, and Timariots. Some Princes in *Georgia*, and *Arabia*, are tributary to him; others have maintain'd their Liberty, in Spite of his formidable Power.

Note again, That Part of these People follow the Dreams of *Mahomet*, and the other is divided into several

Sorts of Religions; for there are found among them *Jews*, and *Greek Christians* of different Sects, the principal whereof are those of the *Melchites*, *Nestorians*, *Dioscorians*, *Armenians*, *Jacobites*, and *Maronites*.—The first, who are in greater Number than any of the others, have three Patriarchs besides that of *Constantinople*, viz. that of *Alexandria*, that of *Antioch*, who resides at *Damascus*, and that of *Bethlehem*.—The *Armenians* have two, one residing in the Convent of *Ecmeasin* in *Georgia*, and the other at *Sis*, in *Aladulia*.—The *Jacobites* have one, who resides at *Caracmit* in the *Diarbeck*.

NATOLIA.

NATOLIA, called antiently *Lesser Asia*, is a great Peninsula, which advances between the *Mediterranean* and the *Black Sea*, as far as the *Archipelago*, and the Sea of *Marmara*.

It was once divided into several Kingdoms, or Provinces; *Cappadocia*, *Galatia*, *Licaonia*, and *Pisidia*, were placed towards the Middle; *Bythinia*, *Paphlagonia*, and the Kingdom of *Pontus*, towards the *Black Sea*; the *lesser Armenia*, Westward of the *Euphrates*; *Cilicia*, *Pamphilia*, *Carbalia*, *Isauria*, and *Lyfia*, towards the *Mediterranean*; *Caria*, *Dorida*, *Lydia*, *Ionia*, *Aeolida*, the *greater* and *lesser Phrygia*, the *greater* and *lesser Mysia* and *Troades*, on the *Archipelago*: All these Kingdoms, or Provinces are again divided into several others, which are distinguished in the Charts of the antient Geography; what I say of it, is only for the Intelligence of those Charts, and of the antient Authors.

At present it is divided into four principal Parts, the most Western whereof, and the greater, retains still the Name of *Natolia*; the three others are *Caramania*, *Amasia*, and *Aladulia*.

The particular *Natolia* takes up almost half of the Peninsulas extending from the River *Casalmach*, on the *Black Sea*, on the Sea of *Marmara*, on the *Archipelago*, and on the *Mediterranean*, as far as the Coast which is between the Island of *Rhodes* and *Xanthe*; whence drawing a Line at the Mouth of the *Casalmach*, we'll part it from *Caramania* and *Amasia*; *Aladulia* is Eastward, between the *Euphrates* and *Caramania*.

The most remarkable of its Rivers, are the *Meander*, at present *Madre*; *Ayala*, otherwise *Sangar*; and *Otagiuth*, or *Cely*.

The City of *CHIUTAGE*, situated on the River *Ayala*, is the Capital of this Province, and the Seat of a Beglerbeg. *Bursa*, which is Westward of it, was the Seat of the *Turkish* Emperors before they had taken *Constantinople*. From thence drawing towards the *Archipelago*, are found the Ruins of the antient *Troy*, antiently so famous, and so often celebrated by *Homer* and *Virgil* in their Verses. Following the Coast, Southward, is found *Smyrna*, at present *Ismir*, a very famous City for the Resort of Merchants who trade in the *Levant*. Advancing still farther, is seen the antient City of *Ephesus*, so well known by the Epistles of *St. Paul*; and in Antiquity, for the famous Temple of *Diana*, which was burnt by the extravagant *Erostrates*, to perpetuate his Memory to Posterity.

CARAMANIA, takes up almost all the Coasts of the *Mediterranean*, between *Natolia*, and *Aladulia*: It is traversed from West to East by Mount *Taurus*, which begins in it.

Its Rivers, Southward, are the *Cedne*, the *Satalia*, and the *Xanthe*; that of *Cogni* in the Middle, where it disembogues into a Lake; and Northward *Gensui*, which passes afterwards into *Aladulia*.

The City of *COGNI*, situated in the Middle of the Country on the River of its Name, is the Capital of the Province, and the Residence of a Beglerbeg.

AMASIA, and *ADULIA*, take up what was antiently call'd *Lesser Armenia*, with a Part of *Cilicia*: The Mount, call'd *Anti-Taurus*, parts *Amasia* from *Aladulia*, and *Caramania*.

Besides the *Euphrates*, which serves them of Bounds Eastward, the Rivers *Casalmach* and *Pornon*, are found in the first; and in the second those of *Jensui*, *Cidne*, or *Carasu*, and *Malmistra*.

CYPRUS, and other ISLES.

Note, That it is not improper to speak here of the *Isle of Cyprus*, and of the others of the *Archipelago*, which are in the Power of the *Turks*, since they are plac'd in the same Chart, and in the Neighbourhood of *Natolia*.

CYPRUS, is one of the greatest Islands of the *Mediterranean*; it having 60 Leagues in Length, 20 or 25 in Breadth, and more than 130 of Circuit: It was antiently call'd *Paphia*, *Salamina*, &c.

It is situated Westward of *Syria*, between the 64 and 68 Degree of Longitude, under the $35\frac{1}{2}$ of Latitude; distant from the main Land about 20 Leagues.

The Climate is very unwholsome, and the Air often loaded with Vapours: The Soil, which was once covered with Wood, is at present very fertile in Wheat, delicious Wine, and excellent Fruits; as Oranges, Lemons, Citrons, &c. It produces Saffron, Rhubarb, and other medicinal Drugs; it feeds a great Quantity of Cattle; and Camblets are made there with Goat's Hairs, which are very fine; it has Mines of Metals, especially a great Quantity of Copper.

The Island of *Cyprus* has no Rivers but only large Brooks and Ponds, which when they grow dry, expose the Inhabitants to great Inconveniencies.

Note, That this Island has always been a Kingdom; and *Pliny* assures us, that it was once divided into nine. After the Decline of the *Roman Empire*, it fell under the Domination of the *Greeks*; afterwards it passed to the Lords of *Lusignan*, of *French* Extraction; and the last Daughter of that illustrious House, call'd *Charlotta*, marrying *Louis of Savoy*, the Dukes of *Savoy*, his Descendants, style themselves still *Kings of Cyprus*. One *James*, natural Son of the last King, assisted by the Soldan of *Egypt*, render'd himself Master of it; then marry'd *Catherine*, Daughter of *Marcus Cornaro*, a noble *Venetian*: This Queen remain'd a Widow, and with Child of a Son, who liv'd but two Years; after whose Death, she gave the Kingdom of *Cyprus* to the *Venetians*, and *Charlotta* claimed it in vain. Since that Time it remain'd in the Power of the *Venetians* till the Year 1571, when *Piali* and *Mustapha* made themselves Masters of it, under the Empire, and in the Name of *Selim II.* Emperor of the *Turks*.

It is at present govern'd by a Beglerbeg, who resides at *Nicosia*, Capital of that Island, where the late Kings used to keep their Court. This Governor comes also sometimes to *Famagosta*, which is a very good Port: The *Knights of Malta* have made this Island their fourth Residence at *Limosso*.

The Island of *RHODES*, is situated in the *Mediterranean*, Southward of *Natolia*, under the $58\frac{1}{2}$ Degree of Longitude, and the $36\frac{1}{2}$ Degree of Latitude: It may have 16 Leagues in Length, 8 in Breadth, and 36 of Circuit, distant from the main Land about 5 or 6 Leagues.

The Climate is temperate, and the Soil very fertile in Meadows and Fruits. It was once famous for the prodigious *Colossus* of the Sun, which was at the Entrance of the Port; it was placed in such a Manner, that the largest Ships could pass between his Legs: It was 70 Cubits high, and was esteemed one of the Wonders of the World.

Note, That the *Knights of St. John of Jerusalem*, called at present *Knights of Malta*, took this Island from the *Saracens* in 1309, after they had lost *Limosso* in *Cyprus*, and kept it till the Year 1522, therefore it was their fifth Residence; and *Solyman the Magnificent* took it by the Treason of the Chancellor of the Order.

Its Capital, which is also call'd *Rhodes*, has a very fine Port, and is the Seat of a Sangiack, depending of the Beglierbewick of *Cyprus*.

The Island of *METELIN*, called antiently *Lesbos*, is situated in the *Archipelago*, under the 40 Degree of Latitude, and the $55\frac{1}{2}$ of Longitude: It may have 50 Leagues of Circuit, and was once in the Power of the *Venetians*; but ever since *Mahomet II.* it has been under

the Domination of the *Turks*: Its Capital bears the same Name.

The Island of *Scio*, is a little more Southward than that of *Metelin*; it has about 30 Leagues of Circuit, and produces a great Quantity of Mastich: The *Genoese* possess'd it during 220 Years; but *Bashaw Piali* conquer'd it, under the Empire of *Solyman II.* who died a few Days afterwards.

The Island of *SAMOS*, is at the South by East of this; its Circuit is of about 24 Leagues: It was once famous for having produced the Sybill *Herophil*, or *Samian*, and several great Men. *Aulus Gellius* says, that the *Samians* invented the Earthen Ware; seeing that their Earth was very proper for those Sorts of Works.

The Island of *Cos*, at present *Lango*, is Southward of *Samos*, and contains about 30 Leagues in Circuit: The antient Temple of *Esculapius*, the Birth of *Hippocrates*, and *Apelles*, render'd it very famous in Antiquity; and it is pretended, that the Manner of making use of Silk-Worms, was invented by a Girl of that Island.

The Island of *PATMOS*, at present *Palmose*, tho' less than the preceding ones, is mention'd in the Holy Scripture, as having been the Place of Exile of *St. John the Evangelist*.

Note, That I'll content myself with inserting the Names of the other *Isles*, in my particular Description, because they have nothing remarkable.

S O U R I A, or S Y R I A.

The Province call'd at present *SOURIA*, or *SORISTAN*, is situated on the *Mediterranean*, which confines it Westward; Southward it has for Bounds the *Stony Arabia*; and the Desert Eastward; and Northward it confines with the *Euphrates*, which parts it from the *Diarbeck*.

It has more than 180 Leagues in its greatest Extent from South by West, to North by East; and about 90 in its greatest Breadth, from South by East to North by West.

The Climate is very wholsome, and the Soil fertile enough, except on the Side of *Arabia*: It produces Wheat, Barley, and Wine; Olive-Trees, Palm-Trees, Lemon-Trees, Orange-Trees, Fig-Trees, and several Aromatics; it abounds with Game, and the Country would be very good, if the Land was well cultivated.

It has no other remarkable Rivers, besides the *Jordan*, and *Orontes*, or *Forfar*; the first springs from the Mountains of *Galilee*, and loses itself in the *Dead Sea*; the other springs, and rolls its Waters through the Middle of the Country, and after it has pass'd through *Antioch*, disembogues into the *Mediterranean*.

It is divided, at present, into three principal Parts; the most Northern, and extended thereof, keeps the Name of *Syria*; that which is at its South by West, is call'd *Phenicia*; and the most Southern, *Palestine* or *Judea*.

Note, That this Province had antiently its own particular Kings, who reigned in that Quality the Space of 246 Years, from *Seleucus Nicanor*, who was the first, to *Antiochus XIII.* whom *Pompey* oblig'd to quit the Throne, for having hid himself during the War; therefore that Kingdom was reduc'd into a Province under the Domination of the *Romans*. Since that Time the *Saracens*, the Christians under *Godfrey of Boitillon*, &c. and the Soldans of *Egypt* possess'd it in Part, one after another; at last *Selim I.* render'd himself entirely Master of it in 1516, and his Successors have kept it ever since. The Grand Seignior has three Beglerbegs in this Province; the first resides at *Aleppo*, a very trading City, and where one of the greatest Commerces of the World is carried on between the *Europeans* and the People of the *Levant*: It passes, at present, for the Capital of the whole Province. The second has his Seat at *Damascus*, in *Phenicia*, which was a long while esteemed the Capital of all *Syria*, and antiently famous for the Conversion of *St. Paul*; and at present for its good Sword Blades, and excellent Fruits. The third resides at *Tripoly*, call'd of *Syria*, to distinguish it from *Tripoli of Barbary*:

bary: This City is situated on the *Mediterranean*, toward the Middle of all the Coasts.

The particular *Syria*, is situated at South by West of the River *Euphrates*, and contains twice as much Land as the two others taken together. In this Province are found *Aleppo*, which is the Capital, and *Antioch* on the *Orontes*, where *St. Peter* founded the third Church of the World, which he governed for the Space of seven Years as a Bishop: The Christians have always a Patriarch there.

PHOENICIA, is on the *Mediterranean*, between *Syria* and *Palestine*. There are found in it *Damascus*, which is the Capital, in which the *Greek* Christians have a Patriarch. *Tyre* and *Sidon*, famous in the Old Testament, but which offer to the Sight nothing, at present, but old Ruins, no more than *Margal*, *Aëtia*, or *Ptolemaides*, which were the second and third Residence of the *Knights of St. John of Jerusalem*, after they had lost the City of *Jerusalem*.

Note, That it is pretended the Inhabitants were antiently very industrious, and the first who invented Boats, by Means whereof they made great Conquests on the Sea; and likewise Writing, according to *Lucan*, who, in his Third Book of his *Pharsalia*, speaks thus:

*Phœnices primi, famæ si creditur, ausi,
Mensuram rudibus vocem signare figuris.*

PALESTINE, once *Judæa*, known under the Name of *Holy Land*, is that Land of *Canaan*, or Promise, which was the Object of the most ardent Desires of the People of *Israel*, at their Coming from the Captivity of *Egypt*.

This Land would be fertile enough if it was well cultivated; but the *Turks* take from the poor Country People the whole Product of their Labour.

The *JORDAN*, which runs through it from North to South, passes through the Lake of *Senechonitis*, and that of *Genesareth*, and goes to disembogue into the *Dead Sea*. This River is famous in Scripture for the Passage of the *Israelites*, and the Baptism of *Jesus Christ*.

This Country, which was once divided into twelve Tribes, is at present divided into two principal Parts by the River *Jordan*: That which is between that River and the *Mediterranean*, is subdivided into four others, the most Southern whereof is the Government of *Jerusalem*, which contains the antient Kingdom of *Judah*, or rather the Tribes of *Judah*, *Benjamin*, *Dan*, and *Simeon*. In the Middle, on the Sea-side, is the Principality of the *Hemir of Cesair*, and on the *Jordan's* Side the Government of *Naplouse*, which is the antient *Samaritania*: These two Provinces contain the Tribes of *Issachar*, *Ephraim*, and Part of that of *Manasses*. Northward is the *Hemir of Saïda*, which is the antient *Galilee*, and which contains the Tribes of *Zabulon*, *Nephthali*, and *Aspher*. The other Part, which is Eastward of the *Jordan*, is a Part of the Kingdom of the *Arabs*; it is divided into six others, the most Southern whereof, towards the *Dead Sea*, is the Country of the *Arabian* Shepherds, antiently *Moabites*, and of the *Nomades*, which contains the Tribe of *Reuben*. Towards the Middle are found Part of the Country of the *Beduin* *Arabs*, or of the antient *Perea*, and the Country of the *Ammonites*: The Province of *Bathar*, antiently *Trachonites*, and that of *Matbanan*, antiently *Bathanæa*, or *Basan*. Northward are found the Province of *Auran*, and the *Sturæa*; these five Provinces contain the Tribe of *Gad*, and the other Part of that of *Manasseh*.

The Capital of *Palestine* is *Jerusalem*, call'd the *Holy City*, because it has been sanctified by the Presence of the Son of God.

Note, That it was particularly over *Palestine*, the last Kings I have mentioned in *Syria*, reign'd: They were call'd only Kings of *Jerusalem*; and *Godfrey of Bouillon* was the first of these Kings, after he had taken *Jerusalem* in 1099: His Successors maintain'd themselves in it as well as they could, till about 1310; so that *Henry II. of Lusignan*, who died in 1317, was the last who received the Crown in that Kingdom,

i. e. at *Ptolemaides* in *Phœnicia*: His Successors kept the Name, but were crown'd at *Famagosta* in *Cyprus*, of which they were Kings likewise.

DIARBEKIR.

This Province contains almost all the antient *Assyria*; the greatest Part whereof, which is between the *Euphrates* and *Tygris*, is call'd *Mesopotamia*; the other, which is Eastward of that River, is still call'd *Assyria*, or *Erzerum*; and the third, which is the most Southern, was call'd *Chaldea*, at present *Yerach*.

Besides the *Tygris* and *Euphrates*, are found among its Rivers the *Alchabar*, the *Soaid*, and the great and little *Zab*; but altho' those which were call'd antiently *Lycus*, and *Caper*, are not so large, they are notwithstanding very remarkable, because of the Defeat of *Darius* by *Alexander*, whose Armies were encamped between these two Rivers when they engaged.

Note, That according to the Opinion of the most learned Interpreters of the Old Testament, it was in *Chaldea*, Eastward of the *Tygris*, God placed the Garden of *Eden*, where he form'd the first Man; and it was in the same Province, that began the first Empire of the World under *Nembroth*, or *Belus*, Father of *Ninus*, or *Assur*, from whose Name it was call'd the Empire of the *Assyrians*, which subsisted very near 1300 Years.

Note also, That there are six Beglerbeks in the *Diarbeck*, the first resides at *Caraetmit*, on the River *Soaide*; therefore we may put that City for the Capital of the Province; *Orfa*, on the *Alchabar*, is also Capital of a Beglerbewick; the Baron de *Beauvau* places one at *Scheheresul* in *Assyria*, Frontier of *Persia*; others one at *Mosul*, on the *Tygris*, in the same Province. *Bagdad*, on the same River, is the Capital of the *Yerach*, and the Seat of a Beglerbeg; there is one besides at *Balsora*, a very trading City, situated at the Mouth of that River.

A more particular Description of *Turky* in *Asia*, is as follows:

NATOLIA, contains *Chiutaye*, *Bursa*, *Angouri*, *Bolli*, *Chiangare*, *Smyrna*, *Ephesus*.

CARAMANIA, contains *Cogni*, *Tiagna*, *Scalemure*, *Satalia*, *Charachizar*.

AMASIA, contains *Amasia*, *Toccat*, *Suvas*, *Trebisond*, *Arisinga*, *Charaisar*.

ALADULIA, contains *Maraz*, *Sis*, *Sarmusada*, *Lajazzo*, *Adena*.

SOURIA, or *SYRIA*, contains *Aleppo*, *Antioch*, *Alexandretta*, *Hamach*, *Hemz*, *Fayd*.

PHOENICIA, contains *Damascus*, *Tripoli*, *Aëtia*, *Balbec*.

PALESTINE, contains *Jerusalem*, *Naplouse*, *Tiberias*, *Joppa*, *Gaza*.

DIARBEKIR, contains *Caraëmit*, *Mosul*, *Orpha*, *Schialasur*, *Alchabar*, *Bagdad*, *Balsora*, *Waset*.

TURCOMANIA.

This Province, which contains almost all the antient *Armenia*, is Eastward of the *Euphrates*, between *Diarbeck* and *Georgia*.

The Mountains *Ararat* are found in the Middle of it; upon one of which, it is pretended that *Noah's* Ark rested after the Flood. Some Authors are of Opinion, that the terrestrial Paradise was somewhere in the Neighbourhood of these Mountains, because of the four Rivers which spring from them, viz. the *Euphrates*, *Tygris*, *Araxes*, and *Pazzo*. In the Country of the *Curdes*, is found likewise the great Lake *Astamar*; which Country takes up the most Eastern Part, which is Southward.

ERZERUM, on the *Euphrates*, is the most considerable City of *Turcomania*, and the Seat of a Beglerbeg; therefore I'll place it for the Capital. *Cars*, or *Chigeri*, had the same Advantage. *Van* and *Schildir*, or *Achlat*, on the Lake *Astamar*, in the Country of the *Curdes*, are also the Capitals of Beglerbewicks.

GEORGIA, or *GURDISTAN*, is situated between the *Black* and *Caspian* Sea; embracing on the first all the antient *Colchid*, at present *Mingrelia*, with the *Avagasia*; on the last, *Albania*, at present *Zuinia*; and Southward

Part

Part of the *Armenia*. Northward is found the Country inhabited by the *Circassian Tartars*, at present called *Comania*. It was antiently the Country of the *Amazons*, whose Courage is so vaunted in History; and who have maintain'd tedious Wars against powerful Kings.

Note, Most of the Inhabitants of these Countries are independant: The others are tributary either of the *Turk*, or of the *Muscovite*. They live commonly under Tents, like the other *Tartars*; they are very cruel, and so addicted to Theft, that they follow no other Business than that of robbing Passengers, or going to War, sometimes for one and sometimes for the other, in the Manner of the *Switzers*.

A R A B I A.

ARABIA is the most southern Region of *Turky*; it has Northward, *Souria*, or *Syria*, the *Euphrates*, and *Mesopotamia*; Eastward the Gulphs of *Balsora*, *Ormus*, and the *Indian Sea*; Southward it confines with the same Sea; and Westward it is separated from *Africa* by the *Red Sea*, and the *Isthmus of Sues*.

It has very near 500 Leagues of Extent from East to West, from *Cape Razalgate* to the Coast of the *Red Sea*, between *Medina* and *Mecca*; more than 420 from South to North, from the Streight of *Babelmandel* to the *Euphrates*; more than 400 of Coasts on the *Red Sea*. as much on the Ocean, and near 350 on the Gulph of *Balsora*.

Note, That besides the *Beglerbegs* the *Grand Seignior* keeps in this Country, there are *Kings*, *Xerifs*, or *Princes*, and some People who have preserved their Liberty against the *Turks*, particularly in the Middle of the Country, which is difficult of Access, because of the Quantity of Mountains which run thro' it.

Among those *Kings* or *Sultans*, those of *Faltach*, *Amanzirifdim*, and *Maffa*, are the most considerable. Among the *Xerifs*, that of *Mecca* is not only Friend of the *Turks*, of the *Persians*, and of all the *Mahometan* *Princes*, but is even very much respected by them, because he is of the Family of *Mahomet*.

Among the People, the *Bengabri*, and the *Beduini*, are the most powerful. Most of them follow no other Profession than that of Thieving; especially the *Beduini*, who are always about *Mecca*, waiting for the Caravans, on Purpose to rob the Pilgrims.

Note also, That it is from *Arabia* those People came, commonly called *Arabs*, *Moors*, *Saracens*, and *Turks*, who made so many Conquests in *Asia*, *Africa*, and *Europe*. Those who have not followed the War, and have applied themselves to Study, have very well succeeded in it, especially in the *Mathematicks*.

Arabia is divided into three Parts, distinguished by the Names of *Felix*, or happy, *Stony*, and *Desart*.

The *Arabia Felix*, which the *Turks* called *Haiman*, is three Times larger than the two others taken together, and advances as a Peninsula into the *Red Sea*, and the Gulph of *Balsora*.

Note, That the *Xerif* of *Mecca*, is one of the most powerful *Princes* of that Country, and possesses a Tract of Land about 40 or 50 Leagues in Breadth, from the *Stony Arabia*, to near *Zibith*; and of more than 260 in Length. The *Grand Seignior* keeps there three *Beglerbegs*, one of whom resides at *Aden*, a very strong City, situated on the Meridional Coast, towards the Mouth of the *Arabick* Gulph: The other at *Zibith*, on the River of the same Name, over-against the Island *Camaran*, in the *Red Sea*. These two Cities were once the Capitals of two Kingdoms, the *Kings* thereof, the *Grand Seignior* caused to be put to Death, after he had conquered their Country. The last *Beglerbeg* resides at *Lassach*, near the Country of *Babrein*; the People who have preserved their Liberty, are either govern'd by their natural *Princes*, or in form of a Republick.

The City of *Mecca* may pass for the Capital, or the most considerable of this Country. It is very famous

among the *Turks*, because their false Prophet *Mahomet*, for a very considerable Time lived in it.

The City of *MEDINA*, *Talnabi*, i. e. the City of the Prophet, is also in Veneration among them, because the Impostor is buried there.

The *Desart Arabia*, called *Cedar* by the *Hebrews*, is known in *Asia* by the Name of *Arden*, or *Bariara*. It is situated between the *Euphrates* and the *Arabia Felix*, confining Eastward with *Chaldea*, and Westward with *Syria*, and the *Stony Arabia*.

It is very sterile, and little inhabited; has very few Cities, that of *Anna*, situated on the *Euphrates*, being the Capital of the whole Province.

Note, That this Province depends in Part of the *Beglerbywick* of *Balsora*, and in Part of some *Princes*, whom the *Turks* have left undisturbed in those *Desarts*, where it is very difficult to conduct an Army.

The *Stony Arabia*, called *Barraab*, is Westward of the *Desart*, between the *Happy*, and *Syria*. It is like the other, very sterile, and has nothing remarkable among the great Number of its Mountains, but the Mount *Sinai*, on which God gave *Moses* the Table of the Decalogue; and the Mount *Horeb*, where the same Prophet struck the Rock with his Rod, whence flowed a Stream; and near which God spoke to him in the burning Bush.

The City of *Harac*, antiently *Patra*, is the Capital of that Province. That of *Medava* is taken for the antient *Moab*, Capital of the *Moabites*, so often mention'd in the Scripture.

A more particular Description of these last Provinces of *Turky* in *Asia*, is as follows:

TURCOMANIA, contains *Erzerum*, *Cars*, *Teflis*, *Eriuan*, *Berdau*, *Aseblat*, *Wan*, *Bitlis*, *Manaschate*, *Samiscabac*.

The Island of *CYPRUS*, contains *Nicosia*, *Famagosta*, *Baffo*.

The Isles of *RHODES*, *Scarpanto*, *Lango*, *Lera*, *Pathmos*, *Nicaria*, *Samos*, *Scio*, *Metelin*, *Paelocastro*.

ARABIA FELIX, contains *Mecca*, *Medina*, *Suada*, *Sanaa*, *Zibith*, *Mocca*, *Aden*, *Fartach*, *Amanzirifdin*, *Maschate*, *Lassach*, *Babrein*, *El-catif*, *Jamama*.

DESART ARABIA, contains *Anna*, *Tangia*, *Thaula*, *Rababath*, *Mexat Aly*, *Anab*.

STONY ARABIA, contains *Herack*, *Eilan*, *Havarra*, *Madian*.

P E R S I A.

This Kingdom, tho' very spacious, is but a Part of the vast Empire which the *Kings* of *Persia*, *Darius's* Predecessors, have antiently possessed in *Asia*.

It extends from the 24 Deg. 30 Min. of Latitude, to the 43; and from the 79 of Longitude, to the 109; so that it may have about 500 Leagues in its greatest Extent from East to West, and more than 300 from South to North.

It confines Eastward with the Territories of the *Grand Mogul*, and *Tartary*; Northward with the River *Gebun*, antiently *Oxus*, which parts it from *Great Tartary*, and the *Caspian Sea*; Westward with *Turky*; and Southward with the Gulph of *Balsora*, and the *Persian* and *Indian Sea*.

The Climate is very temperate, Northward, this Side Mount *Taurus*; but much more hot, Southward, beyond the same Mount, which divides that Country into almost two equal Parts. The Soil is very fertile in all Sorts of Corn, except Rye; and produces every where Bushes which bear Cotton. The Provinces of the northern Parts have whole Forests of Mulberry-Trees, which feed a great Quantity of Silk-Worms; therefore the Commerce of Silk, which is very considerable, makes one of the greatest Revenues of the Kingdom; which abounds with Grapes and Fruits, and feeds a great Number of Camels and Horses, which are found by Drovers of 5 or 6000 each. The King is at the Expence of those Stews, which furnish him with Horses for his Guards. Its Mountains have Mines of Gold, Silver, and Iron; but the *Persians* do not work at the first, for Want of Wood, which is very scarce in that Country.

Country. It has, likewise, several Sources of *Napthe*.

Its principal Rivers are *Tiritiri*, and *Sirt*, in the Province of *Chalistan*; *Bendimir*, and *Drut*, in that of *Farfi*; *Tiffindou*, and *Bassiri*, in the *Kerman*; the great and little *Ilmen*, which join together in the *Makheran*, the first of which bathes the *Sifistan*; *Pulimoilon*, which disembogues into the Lake of *Burgian*, in the *Chorasin*; that which passes at *Gorgian*; *Abissirvi*, which passes at *Ghilan*, and the *Araxes*, which passes in the *Scirvan*, and in *Georgia*. The Lake *Marraga*, which may have 60 Leagues of Circuit, is found in the Province of *Aderbejan*.

PERSIA is divided into 15 principal Parts or Provinces, five of which are Eastward, viz. *Airach* in the Middle; *Chusistan*, on the Gulph of *Balsora*; *Aderban*, *Irvan*, and *Scirvan*, on the *Caspian Sea*, which contains very near the antient *Media*, and Part of *Armenia*; there is besides a Part of *Georgia* on that Sea, which depends of *Persia*; along the Gulph of *Balsora*, and *Ormus*, are found the Provinces of *Farfi*, *Kherman*, and *Makheran*; Eastward, *Send*, *Sefistan*, or *Sistan*, *Sablustan*, and *Candabar*, in Part, which are Frontiers of the Great Mogul, and of *Tartary*. Lastly, going from East to West on the Coasts of the *Caspian Sea*, are found those of *Chorasan*, *Mazanderan*, or, *Tabristan*, and *Ghilan*.

Note, That the *Persians* are the most tractable People of all *Asia*, and could challenge several Nations of *Europe* for Wit and Politeness. It is a marvellous and exemplary Thing, to see the sincere Love they have for one another in a Family, and the great Respect a younger Brother has for his eldest. They value Nobility and Virtue. They are extremely passionate in their Amours, and though they have very handsome Women, with whom they may divert themselves with Safety, since they let them be seen by no Body, they have, besides, little Seraglio's of Children, whom they maintain.

Note also, That the Government of *Persia* is entirely Monarchical, and even Despotick, so that the Will of the Prince is the strongest Law of the State. The Crown is hereditary, not only for the legitimate Children, but likewise for the natural; and the Subjects, till of late Years, had so great a Veneration for their Kings, that they never spoke of him but with the greatest Respect. — This Kingdom began under *Cyrus*, 560 Years before the Birth of *Christ*. It lasted 220 Years under 13 Kings, *Darius*, defeated by *Alexander the Great*, having been the last of them. The *Greeks*, *Romans*, and *Parthians*, possessed it by Turn, till the Year of Grace 227; when *Artaxerxes* revolted against the last, and began the second *Persian* Monarchy, which lasted till *Hormisdas II.* was dethron'd by the *Saracens*, who render'd themselves Masters of *Persia*, in 632, and kept it till 1051. Since that Time it has been under several Sovereigns, till *Ismael*, Sophy, having placed himself on the Throne, re-conquer'd by his Valour, what his Predecessors had lost. After him *Scha Abas the Great*, aggrandized it much in the last Century, and it continued afterwards in a flourishing State, till the Revolt of the Usurper *Mereweis*, who, and his Successor *Efref*, render'd it the Theatre of the most hideous and barbarous Scene, which Revolt and Treason against a legitimate Sovereign could act. I have wrote the Adventures of the unhappy Son of the dethron'd and murder'd Sophy, in Imitation, and in the Style of *Telemachus*, which is full of Instructions for a young Prince how to govern his Dominions, so as to be ador'd by his Subjects, respected by his Allies, and dreaded by his Enemies; and would have it printed, if I could flatter myself to meet with Encouragement. The famous *Kouli Kan*, the present King of *Persia*, has by his Valour, dispers'd all the Clouds which had eclipsed the Lustre of the *Persian* Diadem, and restored to it its former Radiancy.

The King of *Persia* resides at *Ispahan*, Capital of his Dominions. It is situated on the River *Senderut*, in the

Province *Airach*; it passes for one of the largest, fairest, and richest Cities of the World. The *Christians* have a free Exercise of their Religion, in the Suburbs, where they have their Churches.

In the Province of *Irvan*, is seen the City *Nacchiavan*, which the Learned of the Country esteem the most antient City of the World, since the Flood, because its Name signifies the first who came down from the Ark; whereby it may be conjectured it was built by *Noah*, or by his Orders.

Note, That antiently the *Persians* ador'd the Sun, Moon, Fire, &c. at present most of them follow the Dreams of *Mahomet*, according to the Explication and Commentaries of *Haly*, whom they Name *Coadjutor*, or *Lieutenant of God*. There are found among them *Greek Christians*, and some *Catholics*.

A more particular Description of *Persia*, is as follows:

The Province of *AIRCK*, contains *Ispahan*, *Kulpa-jan*, *Scaberrefur*, *Hemedan*, *Casvin*, *Sawa*, *Khæm*, *Kafcham*, *Hyeft*.

The Province of *FARFI*, contains *Schiras*, *Kasron*, *Giâneuba*, *Nagira*, *Siraf*, *Lar*, *Rudban*, *Jarcoya*.

The Province of *SISTAN*, contains *Sistan*, *Huma*, *Araba*, *Musnih*, *Mazurgian*, *Fardan*, *Chaluck*, *Harra*, *Corra*, *Sirum*.

The Province of *SGHOUSISTAN*, contains *Schouster*, or *Sus*, *Hawecz*, *Ardgan*, *Siapour*, *Saurac*, *Astar-Mokran*.

The Province of *KHEIRMAN*, contains *Kheirman*, *Bermasir*, *Bendasir*, *Salcin*, *Chabis*, *Jardestir*, *Gionain*, *Ormus*, *Banderkanrou*.

The Province of *SABLUSTAN*, contains *Bust*, *Sarvan*, *Sarentz*, *Memend*, *Ramel-Emir*, *Grees*, *Becfabath*.

The Province of *CANDAHAR*, contains *Candabar*, *Curvan*, *Cusbecanna*, *Scawa*.

The Province of *ADERBEJAN*, contains *Tauris*, *Ardevil*, *Merrayne*, *Uruna*, *Salma*, *Trois*.

The Province of *SCIRVAN*, *Servan*, *Zachan*, *Schamachi*, *Bachu*, *Bakera*.

The Province of *MACKHERAN*, contains *Mackheran*, *Titz*, *Kambele*, *Bilguri*, *Darei*, *Rafec*, *Jasques*.

The Province of *KARASIN*, contains *Herat*, *Chorasan*, *Tuleskileki*, *Turschis*, *Nisabur*, *Sarachas*, *Merverud*, *Gurgion*.

The Province of *ERIVAN*, contains *Eriwan*, *Karofbag*, *Bilagan*, *Kars*, *Nakschiavan*.

In *GEORGIA*, *Derbent*, *Exechia*, *Teflis*, *Gori*.

The Province of *SEND*, contains *Manfurach*, *Ferabath*, *Ofkum*, *Funkabun*, *Sarijah*, *Asterabath*, *Bijar*.

The Province of *Ghilan*, contains *Ghilan*, *Keiker*, *Resch*, *Layon*, *Mosun*.

I N D I A.

Note, That several Persons understand by the Name *Indies*, all the eastern Parts of *Asia*, including *China*, and all the Isles Eastward of it, as those of *Japan*, *Philippine*, *Molucca's*, *Sonde*, &c. even indifferently all the Countries which produce Gold; and the same Error has bestow'd the Name of *West-Indies* to *America*. But we must observe, that the most licentious Geographers, have never extended that Country beyond the Mounts *Damafian*, which serve for Bounds to *China*, Westward. I even say further, that if we believe the Relation of *M. Marcara*, who liv'd for a considerable Time at *Surat*, and at *Golconda*, as soon as one has passed the *Ganges*, he is out of *India*; and that Part we have always known under the Name of *India beyond the Ganges*, is called by the *Indians* themselves, *Eirbad*, i. e. a Country opposite to the Wind.

INDIA, borrows its Name from the River *Indus*, which springs from it, and bathes it thro' all its Course, towards its Extremities, Westward. The Natives call it *Indostan*.

This Country in general, is situated Part in the Temperate Zone, and Part in the Torrid; for it extends from the 7 Deg. 30 Min. of Latitude, as far as the 41; and

and from the 106 of Longitude, to the 150, or 155, if we include in it the Kingdoms of *Tunquin*, and *Cochinchina*, which are Tributaries of the Emperor of *China*, tho' separated from it.

It confines Northward with the Territories of the Great Cham of *Tartary*, from which it is separated by the Mount *Caucasus*; Eastward with the Mounts *Damian*, which part it from *China*; Southward with the *Indian* Ocean, into which the two Peninsula's advance; and Westward with *Persia*, from which it is separated by a great Number of high Mountains.

The Climate is different according to the different Situation of the Country. The Soil is generally fertile in Rice, Millet, Spices, and Fruits, as Oranges, Lemons, Pomegranates, Figs, Cocoa-Nuts, &c. It abounds with Mines of Copper, Iron, and Lead; it feeds a vast Number of Elephants, Dromedaries, Horses, and Cattle, and has a great Quantity of Monkeys and Parrots.

The most considerable of its Rivers are the *Ganges*, and the *Indus*, from which it borrows its Name. Both have their Source in Mount *Caucasus*, and run throughout the whole main Land, from North to South. It has several more Rivers, of which I'll speak in particular.

Before the Great Mogul had extended his Empire beyond the *Ganges*, *India* was divided into two Parts by that River, the most western whereof was called *India* beyond the *Ganges*, and tho' these common Limits are changed at present, I'll make use of the Terms only, without Prejudice to the Territories which belong to the Great Mogul, beyond the *Ganges*; and say that the first of those Parts is subdivided into the main Land, which is the Empire of the Mogul, and the Peninsula this Side *Ganges*, which includes the Kingdoms of *Golconda*, and of *Visapur*, with the Countries of some Naicks, or particular Princes. The other is likewise subdivided into three principal Parts, the most northern whereof contains the Territories of the Kings of *Ava*, *Pegu*, &c. the most southern embraces the Peninsula beyond the *Ganges*, with the other Dominions of the King of *Siam*. And the latter, which is Eastward, contains the Kingdoms of *Cochinchina*, and of *Tunquin*, tho' they be Tributaries of *China*.

Therefore *India* being divided between so many Sovereigns, has different Governments, according to the different Maxims of the Places. The *Portuguese* and the *Dutch*, have Governors with strong Garrisons, in the Places they are Masters of on the Coasts.

Note, That the *Indians* are Idolaters, particularly those who inhabit the southern Parts. The one adore a sovereign God, the other offer their Vows to the Devil, in Hopes thereby, to avoid, or at least mitigate the Punishments they deserve. Some adore the Planets; some the Rivers; some the Elements; and some a Kind of high Pyramids, they erect themselves. There is a certain Sect of them who believe the Metempsychosis, and have a great Veneration for Oxen and Cows, of which they never eat. They are afraid of killing any Animal whatever, even the Vermin which are troublesome to them, lest the Soul of some of those Beasts should have once animated the Body of a Man. The greatest Part of the Moguls are *Mahometans*; the rest is a Mixture of both, and every where are found *Jews* and *Christians*, ever since the *Portuguese* have entered those Countries.

Note also, That these People are very ignorant, and great Epicures: They are lazy, and leave the whole Care of their Affairs to their Slaves: They love Women to Excess, and are very brutish in their Amours. Some pretend, that a Bridegroom does not touch his Bride the first Night, but leaves her to be deflowered by a *Christian*, or a white Man, whom they call *Mogol*. If it be a Queen, it is one of their *Bramins*, or Priests, who must do that *Drudgery*; after which, if a Woman be convicted of Adultery, she is punished with Death. In several Places, when a Man is dead, and his Body is burnt, according to the Custom of the Country, his Wife would lose her Reputation, and be despised if she was not to burn herself likewise:

There are even affectionate Servants, who burn themselves thro' an Excess of Love, especially if it be a great Man. But however; let it happen as it will, a Woman is never married twice; which would be considered as a very great Punishment by our *European* Ladies. The Subjects of the Great Mogul are cloth'd like the *Turks*; and those who inhabit the Peninsula, go most of them naked, wearing only a Piece of Cotton-Cloth from their Waist down to their Knees; to hide what Modesty forbids exposing to publick Sight.

The Dominions of the GREAT MOGUL.

The *Indians* call *Moguls*, or *Mogors*, the white People, or at least those who are not quite so black as the *Indians* inhabitants of the Peninsula; so that they give that Name to the People of the main Land, who are under the Domination of the Great Mogul.

This Empire extends from the 106 Deg. of Longitude, to the 143, or 148; between the 18 and 40 of Latitude; so that it may have 650 Leagues in its greatest Extent from East to West; and 440 from South to North.

It confines Northward with *Tartary*; Eastward with the Territories of the King of *Ava*; Southward with the River *Gunga*, and some Mountains which part it from the Peninsula this Side *Ganges*; and Westward with *Persia*.

The Climate is very temperate, and the Soil very fertile in Cotton, Rice, and Millet, and produces a great Quantity of Silk, except Northward.

The *Ganges* and *Indus* run through the whole Country, from North to South. The first receives in its Course the Rivers *Conda*, *Perseli*, *Semena*, and *Triotza*, after which it disembogues into the Gulph of *Bengal*, through several Mouths, and forms several Isles. The other, before it surrenders to the Sea, swells its Waters with the Rivers *Nibal*, *Behat*, *Ravea*, *Nach*, *Oder*, and *Cant*, then disembogues into its Gulph through several Mouths. Besides these two great Rivers, there are four found towards the southern Part, which are lesser, viz. *Guenga*, *Narver*, *Tapte*, and *Padder*; the first which runs from West to East, has its Mouth near that of the *Ganges*; the two others have theirs in the Gulph of *Cambaya*; and the last has its Mouth in that of the *Indus*.

To divide all the Kingdoms which compose that vast Empire, I'll begin by the Middle, that I may take Notice of those of *Agra* and *Delly*, in the Neighbourhood of the River *Semena*, because the Emperor resides commonly in their Capitals. I find afterwards *Gaaleor*, Southward of *Agra*; *Bando*, Westward of it; *Jeselmere*, Westward of *Bando*; both in the Neighbourhood of the *Pader*: *Hendouns*, Northward of them, and Westward of *Delly*; and *Jenupar* Northward of it, both in the Neighbourhood of the River *Caul*. Advancing still more towards the Frontiers of *Tartary*, are found *Pengab*, *Naugracut*, and *Bankisch*, in the Neighbourhood of the River *Ravea*: Then descending along the *Indus*, are found *Attoch*, *Multan*, with *Hayacan* Westward of it; then *Buckor* and *Tutta*, which take up the Mouth of that River. Southward, the small Province of *Sores* is situated on the Gulph of the *Indus*; then after that River is passed, one enters the large Kingdom of *Guzarate*, or of *Cambaya*, situated round its Gulph; and advancing likewise Eastward, are found *Chitor*, with the *Raja Ranas*; then *Malvay*, with *Cañdis* and *Berar*, Southward of it: Afterwards one enters the large Kingdom of *Bengal*, which takes up all the Mouths of the *Ganges*, and in which I'll include *Prurop* Westward, *Patan* Eastward, and *Elabhs* Northward. Then re-ascending along that great River, are found Westward *Narvar*, *Sambal*, *Bakar*, *Jambä*, and *Siba*; Eastward, *Mevat*, with *Jesual*, and *Udessa*, which are Northward of it; then *Patna* and *Pitan*. Lastly are found, along Mount *Caucasus*, going from East to West, the following Kingdoms, situated one after another, in this Order; first *Kanduanla* and *Gor*, in the Neighbourhood of *Pitau*: Then *Kakares*, *Kachemir*, *Cabal*, and Part of *Candabar*. The Great Mogul has also conquered the Kingdom of *Orina*, Southward of *Guengua* on the King-

dom of *Golcond*, and Part of *Decan*, on that of *Visapour*.

AGRA, and *DELLY*, are the most considerable Cities of that Empire, and the first passes for the Capital, because the Emperor keeps his Court there; though he has sometimes resided at *Labor Capital of Pemba*.

Note, That besides the Emperor, who governs almost all that vast Empire by his Governors; there are some Kings who are only tributary to him, particularly those they call *Rajas*, as the *Raja Ranas*, between *Chitor* and *Bando*; the *Raja of Camperga* in the Kingdom of *Jamba*; the *Raja Mansa*, his Neighbour; and several others. There are likewise some free People, as the *Rebusti*, in the Kingdom of *Cambaya*, who are Idolaters, and descend from several noble Families, who retreated antiently into the Mountains, where they have preserved their Liberty: The *Portuguese* have several Places on the Gulph of *Cambaya*.

Note also, That most of these People follow the Dreams of *Mabomet*, according to the Commentaries of *Haly*; the others are still Idolaters, except the *Jews* and some *Christians* settled there for Commerce; for the Great Mogul gives Liberty of Conscience.

Note again, That several of the Subjects of the Mogul are Merchants, some apply themselves to Sortileges; and they all, in general, love Women to Excess, and are very impudent in their Caresses: Some say, that they never eat Flesh, but only Fruits and Legumes.

A more particular Description of the Dominions of the Great Mogul, is as follows:

The Kingdom of *AGRA*, contains *Agra*, *Anadipor*, *Secandra*.

The Kingdom of *DELLY*, contains *Delly* only.

The Kingdom of *GUALEOR*, contains *Gualeor* only.

The Kingdom of *BANDO*, contains *Bando*, *Asmere*.

The Kingdom of *JESELMER*, contains *Jeselmere*, *Radimpor*.

The Kingdom of *HENDOWNS*, contains *Hendowns*, *Mearta*.

The Kingdom of *JENUPAR*, contains *Jenupar*, *Necundar*.

The Kingdom of *PENG-AB*, contains *Labor*, *Bember*, *Fetipor*.

The Kingdom of *NAUGRACUT*, contains *Naugracut*, *Callama*.

The Kingdom of *BANKISK*, contains *Bankisk*, *Eis-bar*.

The Kingdom of *ATTOCK*, contains *Attock*, *Puckow*.

The Kingdom of *MULTAN*, contains *Multan* only.

The Kingdom of *HAYACAN*, contains *Chutzan*, *Uche*.

The Kingdom of *BUCKAR*, contains *Buckar*, *Sackay*.

The Kingdom of *TATTA*, contains *Tatta*, *Laurebandet*, *Diul*.

The Kingdom of *GUZARAT*, contains *Cambaya*, *Surate*, *Diu*, *Bacaim*.

The Kingdom of *SORET*, contains *Janagar*, *Pacho*.

The Kingdom of *CHITOR*, contains *Chitor*, *Chitipor*.

The Kingdom of *RAJA RANAS*, contains *Gurchitto*, *Canderu*.

The Kingdom of *MALVAY*, contains *Rantipore*, *Sarampore*, *Ougel*.

The Kingdom of *KANDIS*, contains *Nourangabad*, *Mandao*, *Affere*.

The Kingdom of *BERAR*, contains *Shapor* only.

The Kingdom of *BENGAL*, contains *Xatigan*, *Bander*, *Tanda*, *Elabas*, *Ougeli*.

The Kingdom of *NARVAR*, contains *Gebud*, *Ouden*.

The Kingdom of *SAMBALL*, contains *Samball*, *Menepou*.

The Kingdom of *BAKAR*, contains *Bicaner* only.

The Kingdom of *JAMBA*, contains *Jamba*, *Calseri*.

The Kingdom of *SINA*, contains *Serengar*, *Hord-ware*.

The Kingdom of *MRYAT*, contains *Narval* only.

The Kingdom of *JESUAL*, contains *Rajapore* only.

The Kingdom of *UPESSA*, contains *Jebanac* only.

The Kingdom of *PATNA*, contains *Patna* only.

The Kingdom of *PITAN*, contains *Pitan*, *Camojo*.

The Kingdom of *KANDUANA*, contains *Karakatanka* only.

The Kingdom of *GOR*, contains *Gor* only.

The Kingdom of *KAKARES*, contains *Dankelen*, *Puhola*.

The Kingdom of *KACHEMIRE*, contains *Kachemire* only.

The Kingdom of *CABUL*, contains *Cabul*, *Parna*.

The Kingdom of *ORIXA*, contains *Orixa*, *Pipilipatan*.

The Kingdom of *DECAN*, contains *Kerky*, *Dalvatabad*, *Chail*.

Note, That Poligamy being permitted in the Empire of the Great Mogul, he can bring from all these Kingdoms, a Million of Men into the Field; notwithstanding which the famous Usurper of the Throne of *Persia*, *Kouli Kan*, in his Expedition into that Country has defeated his numerous Armies, conquered Part of his Dominions, taken him Prisoner, and forced him to buy a shameful Peace, at a very dear Rate; though Victories of that Nature are not so glorious as could be imagin'd, since the Emperor, his Generals and Soldiers, are fitter for a Curtain Lecture than for a Military Expedition, being all enervated by Luxury and Effeminacy, and very little instructed in the military Art. For ever since the Great *Oranzeb*, we have not heard that an Emperor of the Mogul has made the least Figure at the Head of an Army.

The PENINSULA this Side GANGES.

This PENINSULA, as I have already observed, advances into the *Indian Sea*, between the 114 and the 124 Degrees of Longitude, as far as to the 8 of Latitude; beginning at the Extremity of the Kingdom of *Golcond*, between the Gulph of *Cambaye*, and the Mouth of the River *Guenga*, where that River parts it from the Territories of the Great Mogul, so that it may have 260 Leagues from South to North; and from East to West 350.

The Climate is so hot, that the People go naked: The Soil is very fertile in all Things necessary for Life, and furnishes a great Quantity of Diamonds: There are likewise Pearls fished on the Coasts of *Coromandel*, particularly towards the Straights of *Manar*.

I have said already, that this Peninsula was divided between two principal Sovereigns, viz. the King of *Golcond*, and that of *Visapur*, call'd *Idalkan*. Besides these two Kings, there are some *Naiques*, or Princes, who are tributary to them; others who are free still, as those of *Samorin* and *Cochin*; and some People, who keep several Places on the Coast, as the *French*, *English*, *Portuguese*, *Dutch*, and even *Indians*.

The Kingdom of *Golconda* is situated on the Eastern Coast of the Peninsula, Southward of the River *Guenga*. What is the most considerable in this Country, is the great Quantity of Diamonds it produces; as also Salt, which makes one of the greatest Revenues of the Kingdom: The King of *Golconda* possesses besides the western Part of the Kingdom of *Bisnagar*, and the most northern Part of the Coast of *Coromandel*, as far as *Coloran*.

The Capital of the Kingdom is *Heider-Abad*, founded by King *Heider-Scha*. It is situated Northward at the Bottom of a Mountain, on which is built the Fortrefs of *Golconde*, to be thereby always Master of the City, which is very large, rich, and very magnificent.

That of *Bisnagar*, once *Chandegri*, Capital of its Kingdom, is situated near the Mountains of *Gate*, which divides the Kingdom between the two Kings of *Golconde*, and of *Visapur*. It is comprised in the Portion of the first, as well as *Narsingue*; which was once the King's Seat.

On the Coasts of *Coromandel* is found *Maliapur*, called also *St. Thomé*, or *Thomas*, because it is pretended, that that Apostle having preach'd the Gospel in those Parts, was martyr'd and buried there, according to the Tradition of the Country. The *Portuguese* say, that at their first Arrival they found ancient Christians called of *St. Thomas*, but much corrupted by heretical Opinions.

The Kingdom of *Visapur*, or of *Decan*, is situated on the Western Coast of the Peninsula, separated by that of *Golconda*, Eastward by the Mountains of *Gate*.

The King of *Visapur*, called also *Idalkan*, possesses the most Western Part of the Kingdom of *Bisnagar*, viz. the

the Province or *Canara*, as far as the Coast of *Malabar*, Part in proper, and Part as tributary. The Province of *Gingi* is also in his Dependencies.

That Part of the Peninsula which advances Southward, from the River *Velar*, on the Coast of *Coromandel*, and the River *Cargerecora*, where begins the Coast of *Malabar*, is divided between several Sovereigns. First toward the Coast of *Coromandel*, Southward of the Province of *Gingi*, is found the Naïke of *Tangair*, farther Southward that of *Madure*, which extends as far as Cape *Camorin*; from that Cape, following always the Coast of *Malabar*, and re-ascending Northward, are found the Kingdoms of *Coulan*, *Cochin*, *Calicut*, &c. and on the western Coasts of *Bishnagar*, the Cities of *Mangelor*, *Barcelor*, *Onor*, and others.

The City of *Goa*, situated in an Island at the Mouth of the River *Mondouii*, in the Kingdom of *Visapur*, is one of the Principal of the *Indies*, and is possessed by the *Portuguese*; where the Viceroy of the King of *Portugal* in the *Indies* resides; and is also an Archiepiscopal See. *Alphonfus* of *Albuquerque* took it from the *Indians* in 1510. Since that Time it has been enlarged and embellished; and what's the most remarkable in it is an Hospital, which passes for one of the finest in the World. The *Indians* have revolted lately against the *Portuguese*, who, we are inform'd by the last Relations receiv'd from thence, have reduc'd them once more to Reason.

A more particular Description of the Peninsula this Side the *Ganges*, is as follows:

The Kingdom of *GOLCONDA*, contains *Heider-Abad*, *Golconda*, *Condapoli*, *Narsingapatan*, *Masulipatan*.

The Kingdom of *BISNAGAR*, contains *Bishnagar*, *Ceringapatan*, *Pentapoli*, *Narsinga*, *Maliapur*, *Paliacate*.

The Kingdom of *DECAN*, contains *Visapur*, *Solapur*, *Bider*, *Paranda*, *Dabul*, *Centapur*, *Carapatan*, *Goa*.

The Principality of *CANARA*, contains *Onor*, *Barcelor*, *Mangalor*, *Gorcopa*, *Bacanor*.

COASTS OF COROMANDEL.

The Province of *GINGI*, contains *Gingi*, *Candabaran*, *Coleran*.

The Principality of *TANJAUR*, contain *Tanjaur*, *Negapatan*, *Trangabar*.

The Principality of *MADURE*, contains *Madure*, *Manancor*, *Tutocori*.

The Coasts of *MALABAR*, contains *Calicut*, *Cananor*, *Manigate*, *Tanor*, *Cranganor*, *Cochim*, *Coleculan*, *Angamale*, *Coulan*, *Truvancor*, *Cotate*.

INDIA beyond the GANGES.

I find this Country is comprised between the 1 and the 33 Degree of Latitude, and therefore should be 640 Leagues in Length from South to North; but it extends, sometimes, in the Maps from the 136 of Longitude, to 152½; and sometimes from the 131½ to 149½; having in its greatest Extent from East to West, sometimes 240 Leagues, and sometimes 320; though, according to the best Relations, it extends as far as the 158; that's to say, more than 500 Leagues beyond.

I have already observ'd, that this Country is divided into three principal Parts; the first whereof, and the greatest, which is Northward, contains all the Territories of the Kings of *Ava*, *Pegu*, &c. The other, which is Southward, contains those of the King of *Siam*, which extends as far as the Peninsula of *Malacca*; and the last, which is more East, embraces the Kingdoms of *Cochinchina*, and *Tunquin*.

The DOMINIONS of the KING of *AVA*, *PEGU*, &c.

The King of *Ava* is one of the most powerful Princes of the *Indies*; because his Empire contains, with his Kingdom of *Ava*, those of *Pegu*, and of *Arracan*, the ancient Kingdom of the *Bramins*, or *Brachmans*, and several Nations which are Westward of *China*, as the *Timocoites*, the *Guyes*, those of *Ciocangue*, the *Layes*, &c.

These Dominions take up about 340 Leagues from South to North, and 180 from East to West.

They confine Northward with *Tartary*; Eastward with *China*, and the Kingdom of *Tunquin*; Southward with the Kingdom of *Siam*; and Westward with the Gulph of *Bengal*, and the Territories of the Great Mogul.

The Climate is very temperate considering its Situation, and the Soil very fertile in Rice, Miller, and excellent Grapes. It produces a great Quantity of fine Fruits, and feeds a vast Number of tame, as well as wild Beasts, viz. Elephants, Camels, Horses, Sheep, Civets, Hermines, &c. There is found in it a great Quantity of Rubies, the finest of all the West, of Sapphires, Emeralds, Turquoise, and other precious Stones. It produces likewise Benzoin, Bezoard, &c. the Calamba, Aloes, and Canes as big as a Hoghead.

This Country is as agreeable as it is fertile, is watered by several great Rivers, among which there are four remarkable ones, which flowing from the Lake *Chiamay*, traverse it entirely from North to South. The greatest and most Eastern is called *Menan*, which bathes the Cities of *Prom*, *Tavey*, *Brema*, *Tanju*, and several others which were once Capitals of Kingdoms; then enters that of *Siam*, passing through *Odia*, which is the Capital, when it forms two Isles, then disembogues into the Gulph of *Siam*. The second is that of *Caypumo*, or of *Pegu*, which waters the Cities of *Melintay*, *Ava*, *Canarana* and *Pegu*, also Capitals of Kingdoms. The third is called *Cosmin*, which passes in the *Bengal*, then disembogues into its Gulph. The last is that of *Caor*, which disembogues towards the same Gulph into one of the Mouths of the *Ganges*. Between the Rivers of *Pegu* and *Cosmin*, there is a very considerable one, which seems to receive its Waters from two Arms of this, which join near the City *Cassubi*; then entering the Kingdom of *Arracan*, divides itself into two Branches, the most Southern whereof passes through the Capital: It must be observ'd, that these Rivers overflow their Banks like the *Nile*, and thereby fertilize the Country.

The Kingdom of *Ava* takes up three Times as much Land, as those of *Pegu* and *Aracan* taken together. It is situated Northward of these, and contains several Kingdoms of the *Brachmans*; that of *Pegu* is the most Southern, and confines with that of *Siam* Southward, including those of *Tangu* and *Marfin*. The Kingdom of *Arracan* is between both, situated on the Gulph of *Bengal*.

The City of *Ava*, situated on the River *Caypumo*, or of *Pegu*, is the Capital, not only of its particular Kingdom, but likewise of all those Territories. The King resides in it.

The other Kingdoms tributary or subject, have also their Capitals, from which they borrow their Names, as *Pegu*, *Arracan*, *Brema*, *Comarane*, &c.

KINGDOM of SIAM.

The Empire of the King of *Siam*, extends not only in the Peninsula beyond *Ganges*, as far as Cape *Sincapura*, but contains besides the Kingdom of *Martuban*, which is on the Gulph of *Pegu*, that of *Zangima*, and that of *Camboya* on the Gulph of *Siam*; to which some add *Chiampa*, as Part of *Camboya*, but which others place in *Cochinchina*.

These Dominions are all situated on the Sea, except *Jangoma*, and may contain 160 Leagues from South to North, and about 200 in its greatest Extent from East to West, above the Peninsula.

It confines with the *Indian* Sea on all Sides, except Northward, and a little Eastward, where it confines with the Kingdoms of *Pegu* and of *Cochinchina*.

The Climate is very temperate, considering that it is so near the Line; because perhaps of the Narrowness of the Country, which is refreshed by the Winds and Dews. The Soil is fat, and very fertile in Rice, Barley, and Fruits. It produces a great Quantity of Pepper, Benzoin, Musk, and Aloes. There are found in it Mines of Gold, Silver, Copper, Tin, and other Metals. It feeds a great Number of Elephants and Horses; it has large Forests towards *Cochinchina*, which serve for Retreat to Tygers, Lyons, and other ferocious Beasts. In the Peninsula of *Malacca*, there is a Species of Swallows, who make their Nests with a certain bituminous Matter, and whose Nests are carefully gathered, to be pounded and used in Sauces, in Lieu of Spices.

The River *Menan* traverses the particular Kingdom of *Siam*, passing thro' the City *Odia*, its Capital, (as already observ'd)

observed) forming two Isles, and disembogues afterwards into its Gulph. The *Mecon* separates it from *Cochinchina*, then crosses the Kingdom of *Camboya*, at the Extremity whereof it divides itself into three Branches, the most Eastern of them passing thro' the Capital.

These Dominions may be divided into four or five Parts; that above the Peninsula in the Middle of the others, is the particular Kingdom of *Siam*; Westward of it is that of *Martaban*; Eastward that of *Camboya*; that of *Campa*, which is Eastward of this; and the Peninsula of *Malacca*, which advances Southward. This Peninsula, contain'd antiently several Kingdoms, at present reduced into Provinces; the Princes whereof are subject and tributary of the King of *Siam*; the sole City of *Malacca* being exempt of Tribute. It is situated on a Streight of the same Name, over-against the Island of *Sumatra*. The great Concourse of Merchants from all Parts, renders it very trading, and well inhabited, though the Air be very unwholsome. It is in the Power of the *Dutch*, who took it from the *Portuguese* in 1641, who had kept it 130 Years.

The Capital of all these Territories is *Odia*; the other Kingdoms have also their Capital Cities, which will be found in my particular Description.

C O C H I N C H I N A.

It is said that the *Portuguese* gave the Name of *Cochinchina* to this Kingdom, because of its Resemblance with the Province of *Cochin*, in the *Malabar*, as if they would say, the *Cochin* of *China*; others say, that it signifies *western China*.

It is situated on the Gulph of the same Name, between the 11 and 17 Deg. of Latitude; so that it may have 150 Leagues of Coasts, and about 70 in Breadth, including the People *Kemi*, who occupy more than half of it.

It has for Bounds, Northward, the Kingdom of *Tunquin*; Eastward the Sea; Southward the Province, or Kingdom of *Chiampa*, which some include in it; and Westward that of *Camboya*.

Its Climate is very temperate and wholesome, though in the Torrid Zone; and there is no Country in this Zone, where the Seasons are better distinguished than in this. The Soil is extremely fertile in Rice, Fruits, and several Sorts of Herbs. It produces Cinnamon, Pepper, Calamba, Benzoin, &c. also affords Gold, Silver, Silk, and Cotton. Among the great Quantity of different Animals seen in it, are the Rhinoceros, Fese, and Elephant, and there are some of these last so large, that one of their Feet has measur'd 18 Inches Diameter, and their *Brunchia*, or Trunks 14 or 15 Foot in Length. These Animals are so docile, and if I may use the Expression, so intelligent, when they are instructed, that when they set out on a Journey, the *Nair*, who governs them, has but to tell them the Road they must follow, they never fail doing it exactly. — Among Birds of a thousand different Species, is seen a great Number of those Swallows heretofore mention'd. The Sea abounds with excellent Fish, so that it is the most delightful Country of all the *Indies* for its Bigness.

There are no considerable Rivers in it, but it has 50 or 60 fine Sea-Ports; and what is the most remarkable is, the Inundation which happens in *Autumn* every fifteenth Day, lasts three Days each Time, and renders the Land so fertile, that three Harvests may be made in one Year.

CACCION, is the Capital of the Kingdom, and the Residence of the King; where a great Commerce is carried on between the *Chinese* and the *Japanese*; to whom the King of *Cochinchina* has permitted to build the City, and Fortrefs of *Fiafo*, for the Commodity and Security of the Commerce.

Note, That this Kingdom made once Part of *China*; but a Prince of the Family of *Zy*, rendered it free; in Consideration of a Tribute which he consented to pay, and his Successors pay still to the Emperor of *China*. This Separation of *Cochinchina*, happen'd about the Year 1428, under the Empire of *Sivintins*.

Note, That the People are almost all Idolaters, there are still some *Christians* among them, but not in great Number, because the last Kings have cruelly persecuted them. The *Fathers Jesuit* say, that they are very docile, and courteous to Foreigners, faithful in Commerce, courageous, and understand very well how to use Fire, and other Arms.

T U N Q U I N.

This Kingdom, which the eastern Nations call *ANNAM*, i. e. western Country, is called *Tunquin* by the *Chinese*, because situated Westward of them.

It is situated round the Gulph of *Cochinchina*, between the 140 and the 150, or 155 Deg. of Longitude, the 17 and the 22½ of Latitude; so that it may have 170 Leagues from East to West, 100 thereof is in Coasts, and 120 from South to North.

It confines Eastward with the Province of *Quantung*; Southward with the Gulph and Kingdom of *Cochinchina*; Westward with a long Ridge of Mountains, which separates it from the *Laves*, and other People in the Neighbourhood of *Pegu*; and Northward with the Provinces of *Junnan*, and of *Quamsi*.

Its Climate is almost equal to that of *Cochinchina*; and the Soil, tho' it produces neither Corn or Wine, is very fertile in Rice, which is gathered twice a Year, and of which the Inhabitants make their Bread and Wine. It produces excellent Fruits, particularly Oranges of an extraordinary Bigness. Among the Animals, is seen a great Number of Rhinoceros, Elephants, and Horses. It has also a great Quantity of Fowls, Pigeons, Turtles, and other Volatiles. They catch on the Coasts a great Abundance of delicious Fish.

This Kingdom is traversed by three or four very considerable Rivers, which come from the Province of *Junnan*, and fall into the Gulph of *Cochinchina*.

Its Capital is *Keccio*, situated in the Middle of the Country, on the lesser of the three Rivers, and where the King resides.

Note, That the King of *Tunquin* has several Princes among his Subjects, and several others who are tributary to him; tho' himself pays Tribute to the Emperor of *China*, to whom he sends every six Years, two Golden Statues, and two Silver Ones, of the Value of 400 l. Sterling.

Note also, That the People are all Idolaters, except 300,000 *Christians*, or more, who may be found among them: They are free, and very affable,

A more particular Description of *India* beyond the *Ganges*, is as follows:

The Kingdom of *AVA*, contains *Ava*, *Prom*, *Tolena*, *Melintoy*, *Totay*, *Boldia*, *Translana*, *Canarana*, *Muantay*, *Cassubi*, *Camotay*, *Brema*.

The Kingdom of *PEGU*, contains *Pegu*, *Marsin*, *Tanju*, *Ledoa*, *Siriacon*, Island.

The Kingdom of *ARRACAN*, contains *Arracan*, *Cadoiiasan*, *Sore*.

The Kingdom of *COCHINCHINA*, contains *Cacciam*, *Haifo*, *Queboa*, *Benda*.

The Kingdom of *SIAM*, contains *Odia*, *Sacotay*, *Bangkok*, *Moro*, *Lugor*, *Tanacerim*, *Ligor*, *Juncalaon*, or *delong*, *Patana*, *Queda*, *Pabang*, *Ihor*, *Malacca*.

The Kingdom of *MARTABAN*, contains *Martaban*, *Tuquala*, *Macaon*.

The Kingdom of *CAMBOYA*, contains *Camboya*, *Ravecca*, *Tarvana*, *Carol*.

The Kingdom of *CHIAMPA*, contains *Polucaccim*, only.

The Kingdom of *TUNQUIN*, contains *Keccio*, only, as I know of.

C H I N A.

This Empire has been called by different Names, by the neighbouring Nations. The Name of *China*, it bears at present, comes from one of its Kings, called *Cina*, who reign'd 46 Years before the Coming of *Christ*.

The *French* Maps mark its Extent from the 20 Deg. of Latitude, to the 43; and from the 140 of Longitude, to the 173 only; so that it should have but 400 Leagues from South to North, and 450 from East to West; tho' some

some give it 560 Leagues in Length.

It has for Bounds, Northward, a strong Wall, 3 or 400 Leagues long, 45 Foot high, and 18 or 20 in Thickness, which separates it from the Kingdoms of *Tanju*, and *Neuche*; Eastward the *Eastern Ocean*; Southward the same Ocean, and the Kingdom of *Tunquin*; and Westward the *Damafian Mountains*, which separate it from several Nations, Subjects or Neighbours of the Kingdom of *Ava*.

The Climate is very cold, Northward, considering its Situation, because of the great Number of high Mountains always cover'd with Snow; and very temperate Southward. The Soil is fat, and very fertile in Corn, Wine, Barley, Maize, Millet, Cotton, and all Sorts of delicious Fruits. There are found in it some Pastures all cover'd with Flocks. The Forests abound with Game, the Sea and Rivers with Fish. It has Mines of Gold and Silver, Rubies, Topazes, and Load-stones. The China-Ware, Silk, Line, Cotton, and the rich Stuffs made of them, make one of the principal Revenues of the Country. It affords Salt, Sugar, Musk, Ambergrease, and all Sorts of Spices. In short, it is one of the most delightful Countries of the World.

The most remarkable of its Rivers are the *Kiang*, and the *Hoang*. The first, which is the greatest, is called by the *Chinese*, the *Son of the Sea*, it takes its Source in the Province of *Junnan*, Frontier of *Tunquin*. Its Course in general, is from East to West, though it makes from Time to Time several large Plaits, sometimes on one Side, and sometimes on another; then it passes through the Lake *Tungting*, in the Province of *Huguang*, and through the Province and City of *Nanquin*, it disembogues into its Gulph. The other, called commonly the *Yellow River*, springs from a great Lake, which is Eastward of the *Damafian Mounts*, in the Country of the *Guyes*, then having glided for the Space of about 100 Leagues, turns towards the North by West, in the Length of 50; then returns towards the North by East, in the Space of 200; and touches in its Course the Extremity of that famous Wall above-mention'd; afterwards it makes a Plait Southward, and comes to pass that Wall; after it has rolled thus its Waters more than 100 Leagues, it conducts them Eastward 200 more, then disembogues into the Gulph of *Nanquin*.

CHINA is divided into 17 principal Provinces. First are found round the Gulph of *Nanquin*, those of *Pequin*, *Leatung*, with the Peninsula of *Corea*; Eastward those of *Xantung*, and *Nanquin*. Then following Southward, the Coasts of the Ocean, the Provinces of *Chequiano*, *Fokien*, and *Cantung*. In the Middle, re-ascending from the South towards the North, are found in this Order, those of *Kiangsi*, *Quiangsi*, *Queichieu*, *Huguang*, *Honan*, and *Xamsi*. Westward, descending from North to South, those of *Xensi*, *Suchuen*, and *Junnan*.

Peking, is at present the Capital of *China*. Its Name signifies the *Capital City Northward*; and *Nanking*, which had once that Advantage, signifies the *Capital City Southward*. The City of *Peking* is very strong, and situated at the Extremity of *China*, 30 Leagues from the great Wall, in an uncultivated Place; though it abounds with every Thing from all Parts. Its Streets are not paved, and the Inhabitants and others are obliged to wear during the Summer, a Veil, not to be blinded by the Dust. It is the Custom there, to ride thro' the City on Horseback, particularly in Winter, because of the Dirt; and one may have a Horse for a whole Day for the Value of Two-pence *English* Money.

Note, That this Country has been Time out of Mind, govern'd by a King or Emperor, called by his Subjects the *Son of Heaven*, and to whom they render a Sort of Adoration. He resides at present at *Peking*. Its Government is not much changed, tho' it was conquered at the Beginning of the last Century, by the Great Cham of *Tartary*. There are always in the Imperial City of *Peking*, six principal sovereign Courts: The first is the *Council of State*, whose Members have the Nomination of all the Magistrates and Judges of the Provinces. The second is a *Board of Finances*, to receive the King's Revenues. The third is to take Care of the Temples, Priests, Sacrifices, Ceremonies,

Embassies, publick Feasts, Marriages, and of all that concerns Religion. The fourth takes Care of the War, has the Intendency of Posts and Employments, and of all that depends of it. The fifth takes Care of the publick Buildings, as Bridges, Dykes, Walls of Cities, Palaces, Ships, and of the Pensions of the Princes of the Blood. The last is established for Criminal Affairs. There are in the Capital of each Province, the same Courts, but subaltern to these, whose Magistrates, called *Mandarins*, give an Account of their Administration, each according to his Office, to those of the Sovereign Courts at *Peking*. Besides these, others are sent by the Emperor, who are commonly *Grandees* of the Empire; one call'd *Tutung*, is like a *Triennial Viceroy*, who commands all the other *Mandarins*. The other called *Clayven*, is like a general Commissary, appointed to examine the Departments, not only of the *Mandarins*, but of the *Tutung* himself: This is changed every Year.

Note also, That the *Chinese* are all Idolaters, and extremely superstitious; which, notwithstanding, they have always acknowledged a supreme and only God, whom they call *King of Heaven*. Among them are found Monks who lead a very strict Life; and also *Mahometans* and *Jews*. The Fathers Jesuits are supposed to have at present in that Country, under their Direction, above 300,000 *Christians*. The *Chinese* love Sciences, as it appears from the great Credit and Reputation the Fathers Jesuits have acquired among them, thro' that Means; they are ingenious, politick, and industrious. They have a large Face, little and long Eyes, a flat and short Nose, short Hair, and walk very upright. They say, that they had the Use of Artillery, and of Printing long before us. Children shew a great deal of Respect to their Parents, and Parents keep among them a very strict Amity, and are very courteous to one another. They are very jealous of their Wives, whom they keep shut up with a great deal of Care. They eat in a very slovenly Manner, and are as slovenly serv'd. It is said, that a Man of Quality to do honour to a Lady, spits in her Hand, which in my Opinion, is a very uncivil Civility. When a young Man has attain'd the Age of 25 Years, he must either marry, or become a Monk. A certain Day is fix'd, in which all the young Men and Maids to be married meet. The young Men, let their Faculties be known (I mean as to their Fortune) then they are divided into three Classes, the first is that of the Rich, the other are those of a middling Circumstance, and the last of the poorer Sort. The same is observed with Regard to the Maids, separating the handsomest from those of an indifferent Beauty, and from the ugly. The handsomest are given to the Rich, who give to the Board a certain Sum of Money to have them, those who are but indifferent in their Person, are for those who are also but in indifferent Circumstances, and the ugly are for the Poor, to whom is distributed the Money given by the Rich. This Policy is very judicious, but a little too perplexing.

A more particular Description of *China*, is as follows:

The Province of PEKING, contains *Peking*, *Paoting*, *Jeneping*, *Chinting*, *Xunte*.

The Province of LEAOTUNG, contains *Leoyang*, *Kinchen*, *Ningyven*.

The Province of COREA, contains *Pinggan*, *Sior*, *Chentio*, *Sogsiang*.

The Province of XANTUNG, contains *Chinan*, *Yenchin*, *Tunkchang*, *Caiecheu*, *Tingcheu*.

The Province of NANKING, contains *Nanking*, *Hoaigan*, *Yenchin*, *Luchin*, *Canking*, *Chicheu*, *Hoeichin*, *Kiating*.

The Province of CHEKIANO, contains *Hangcheu*, *Huchin*, *Nimcheu*, *Chuchin*, *Chencheu*.

The Province of FOKIEN, contains *Fochin*, *Changcheu*, *Tenping*, *Tingcheu*, *Xaow*.

The Province of QUANTUNG, contains *Quangcheu*, *Caocheu*, *Xaocheu*, *Hoeichin*, *Mocao*, Island.

The Province of KIANOSI, contains *Nanchan*, *Kimchang*.

chang, Kiegan, Cancheu, Nangan.

The Province of QUANGSI, contains *Queilin, Guchou, Tiencheu, Nancring, Cincheu.*

The Province of QUICHEU, contains *Quacyang, Su-cheu, Sunan, Liping, Chinyven, Tucho.*

The Province of HUQUANG, contains *Huchang, Changxa, Pokiag, Kangcheu, Siangiang, Chiatim, Jungcheu, Hoangcheu.*

The Province of HONAN, contains *Ciafung, Queite, Changte, Gueiboei, Hoaiking, Honang, Nanyang.*

The Province of XANSI, contains *Taiyven, Pingyang, Taitung, Fuencheu, Lugan.*

The Province of XENSI, contains *Sigan, Fungciang, Hanchung, Pinglean, Cunchang, Linyao.*

The Province of SUCHUEN, contains *Chingtu, Pao-ning, Xungking, Chungking, Quicheu, Lunggan, Mabu.*

The Province of JUNNAN, contains *Junnan, Tali, Lingon, Chingkiang, Quangnan, Chinyven.*

The Province of HAINAN, contains *Cheu, Kuncheu, Yai.*

The Isles are *Formosa, Cheuxan, Changpa.*

GREAT TARTARY.

Note, That before I proceed on the Description of this vast Country, I must confess freely, that the Relations we have of it are very uncertain, even perhaps imaginary, and founded only on Conjecture; for it is certain, that that Country is almost as little known to us, as the *Terra Australis*, except towards *Persia*; not only because of its great Distance from us by Sea as well as by Land; but because likewise of the high Mountains and frightful Desarts it is environ'd with, on the Land Side, which render it inaccessible; and of the Rocks and Sand Banks found on its Coasts, Eastward, and of the continual Ice which bounds it Northward, which hinders the *Europeans* from trading thither, and consequently from giving us faithful Relations of it. Notwithstanding which I must speak of it, but I'll content myself with relating what has been said the most probable of that Country.

The Name of *Tartary* derives from the River *Tartarus*, found in it Northward; and it is called *Great*, to distinguish it from the *Little Tartary*, which is in *Europe*. Our Ancestors have known it under the Name of *Scythia*, at least in part.

The modern *Geographers* makes its Extent to be from the 88 Degrees of Longitude, to the 190, without including what the *Muscovites* possess Westward; and from the 34 of Latitude, to the 71½, so that it might have 1500 Leagues in its greatest Extent from East to West; and about 180 from South to North.

It has for Bounds Eastward the Sea of the *Kaimachites*, and the Streight of *Jesso*: Southward *China*, the *Indies*, and *Persia*: Westward the *Caspian Sea*, and the Territories of the *Empress of Muscovy*: And Northward the northern Ocean.

The Climate of the Country is various, because of its great Extent; but is generally very cold, and even very hard Northward, where the Wind is sometimes so violent, that it throws down Men, Walls, and tears up the Trees by the Root. The Soil is like the Climate; for on that Side it is steril, full of Marshes and uncultivated Mountains. Southward it produces Rice, Hemp, and Rhubarb in Abundance; and also Silk, Cotton, Wool, and Musk. It feeds every where a great Quantity of Horses and Camels; and Northward are found white Bears, black Foxes, Ermines, and several other Animals, whose rich Furs make the principal Commerce of the Country. There are found in it several high Mountains, large Forests, and vast Desarts, full of Sands and Marshes, which render Part of the Country uninhabitable.

The most remarkable of its Rivers are the *Ghammas*, which springs in the Middle of the Country, from the Mountains of *Bengiar*, and running from West to East for the Space of about 600 Leagues, passes through the City of *Chacan-Kaimack*, and disembogues into the Sea of the *Kaimachites*. The *Tartar*, the *Oby*, and the *Jenesis*, disembogue into the Northern or Glacial Ocean, one Eastward, the two others Westward. The *Jaik*, *Rudba*, and *Gibun* disembogue into the *Caspian Sea*.

In the Middle of the Country are found the great Lake *Carantia*, antiently *Kitay*, which may have 300 Leagues of Circuit; that of *Bervan*, towards Mount *Caucasus*; that of *Cabama* towards Mount *Farvan*, under the 55 Degree of Latitude, and the 122 of Longitude; that of *Izejora*, towards the *Muscovite Lucomaria*, and several others which have no Name.

Tartary has always been divided into five principal Parts, the most Southern thereof are the *Kathay*, Eastward, the *Turchessan* in the Middle, and the *Lagathay Usbeck* Westward; the two most Northern are the proper or true *Tartary* Eastward, and the *Desart* Westward. The *Arabs* divide this Country in another Manner. First Northward, they give the Name of *Moal* to the Country which we include Part in the true *Tartary*, and Part in the northern Part of the *Desart*. They call *Kaimash* or *Naiman*, the Middle of that vast Empire, which is in the Neighbourhood of the great River *Ghammas*; and the western Part is distinguished under four principal Names, viz. *Chaulach*, or *Karakatay*, and *Kalmuki-Buckar*, which contains the other Part of the *Desart Tartary*: *Chalsag* or *Kashgar*, and *Mawaraluhara*, which very near contain the *Usbeck*. Southward, going from West to East, are found the Countries of *Tabbat*, or *Thibet*, *Thokive*, or *Tanju*, *Niuche*, *Niulhom*, and *Yapie*.

The Capital of *Tartary* is *Cambula*, situated in the *Kathay*, on the River *Tangi*. The Cities of *Thibet* and *Kashgar*, are the Capitals of their Countries; to which they have given their Names. *Samarkand*, in the *Usbeck* or *Mawaraluhara*, was the Country of the great *Tamerlane*.

Note, That the *Tartarians* are brutish, treacherous, and cruel, especially in War; where they slaughter their Prisoners, drink their Blood, and often eat their Flesh. Their Brutality is not fatiated in the Enjoyment of several Wives, but they seek besides the other Sex: Their common Drink is made with Rice and Mare's Milk. When the *Cham* dies, they kill several of his Officers to go to serve him in the other World, and give him something to eat and drink on the Road.

Note also, That this Empire is governed by several Kings or Princes, who are subject or tributary of a Sovereign they call *Cham*. The Life and Fortune of his Subjects are in his Power, and can deprive them of both when he pleases, without any other Formality. They call him *Son of God*, *Soul of God*, and *the Shadow of God*. They never speak to him Face to Face. Even Embassadors observe this Custom, and speak to him by an Interpreter.

Note again, That the *Tartars* are either Idolaters or *Mahometans*, and there are found still among them a few antient *Jews*, and few heretick Christians who follow the Errors of *Nestorius*. The Idolaters believe two supreme Gods, one of Heaven, and the other of Earth: They ask the first for Wit and Health; and pray the last to send them a great Abundance of Cattle and Fruit. They are superstitious, adore the Sun, the Moon, Stars, the Elements, and believe the *Metempsychosis*.

A more particular Description of *Great Tartary* is as follows.

KAIMACH, contains *Chacankaimach, Monastab, Buragh, Sitiam, Astur, Benjar, Giarda, Chanaves, Chaican, Carantia.*

MOAL, contains *Mongul, Tartar.*

KASHGAR, contains *Kashgar, Acfu, Lop, Damortab, Habiacu, Rudhorn, Taraz.*

MAWARALNALIZA, contains *Samarkand, Kath, Kardau, Bochara, Sagamjan, Belch, Badasfan, Bangbir, Thalecan, Aderkan, Babrenc, Marvasian, Choyandab, Alshath, Tonia, Ilack, Munkishlack, Jand.*

KARAKATAY, contains *Sabadrug, Arzd, Dadeni, Chauran, Marzan, Chartan, Dambaba, Lockman.*

The **THIBET**, contains *Thibet, Cucia, Cialis, Bervan, Ug.*

NIUCHE, contains *Acbbaluch, Serra, Guengan, Tudin.*

The **KALMUKI**.

BUCHAR, contains *Daranda, Darch, Marghan, Giaghan, Hian, Sarabic, Nabia.*

The

The *TANJU*, contains *Tanju*, *Xama*, *Pucian*, *Suchur*, *Erzina*.

The *YUPI*, contains *Sinnadre*, *Cantebouri*, *Brema*, *Tinzu*.

ISLES of ASIA.

Note, That I have placed for a sixth Part of *Asia* all the Isles Eastward and Southward of it. The first, and nearest *Tartary*, are the Isles of *Japan*. The others are the *Philippines*, *Molucca's*, those of the *Sonde*, the *Maldives*, the Isle of *Ceylon*, and several others which are in the *Indian Sea*. To which I'll add the Isles of the *Larons*, which are farther advanc'd Eastward.

ISLES of JAPAN.

Note, That the antient *Geographers* have not known this Name of *Japan*; and *Ptolemy* speaks, in its Place, of a certain Island abounding in Gold, which he places Eastward of *China*, and which he calls *Japadyinsula*, or Isle of *Barley*; which the most learned *Geographers* take to be the Isle *Nippon*, the greatest of those of *Japan*.

These Isles are situated Eastward of *China*, between the 31 and 40 Degrees of Latitude; and extend from the 171 of Longitude, as far as the 188.

The Climate is very temperate, and wholesome; the Soil, though hilly, is very fertile in Barley, Rice, Millet, and several Sorts of Fruits; but it produces neither Wheat nor Wine. Its greatest Fertility is in Gold and Silver, which are there in such great Quantities, that some have imagined, that the whole Soil was of those two precious Metals: It has Elephants, Camels, Horses, and Abundance of Game.

There are several Rivers and Canals, which traverse those Isles in such a Manner, that they divide them into several Parts; which have besides some Lakes, several Gulphs, and very good Sea-Ports.

Among those Isles, which are in great Number, there are three remarkable ones: The first is called by the Inhabitants *Nepbon*, i. e. Source of Light: The second in Bigness *Ximo* or *Saycock*, i. e. nine Kingdoms; and the other *Tokoôti*, or *Xicock*, i. e. four Kingdoms.

The Island *Nippon* is four Times bigger than the two others taken together, having at least 220 Leagues in its greatest Extent from East to West, 75 in its greatest Breadth, 30 in its lesser, and near 600 of Circuit: There is seen in it a Mountain which throws up Flames like the *Ætna*.

It contained once 53 Kingdoms; at present it is divided into five principal Parts; which are *Jamaysoit*, *Jetsengo*, *Jetsegen*, *Quanto* and *Ochio*, which are found in this Order, going from East to West, and which are again subdivided into several Provinces.

The Island *Ximo* is situated at the South by West of *Nippon*, under the 31 Degrees of Latitude, and 172 of Longitude, and may have 60 Leagues in its greatest Extent from North to South, 25 or 30 from East to West, and 160 of Circuit, the Gulphs excluded.

The Island *Xicock* is situated Southward of *Nepbon*, under the 175 Degree of Longitude, and the 32 Deg. 30 Minutes of Latitude, having about 45 Leagues in Length, 15 in Breadth, and 120 of Circuit: It is less cross'd with Rivers and Canals, and less divided.

The other Isles which are in the Neighbourhood are not comparable to these; though some of them have had antiently their own Kings, and have still their Lords or Princes.

The City of *Macao*, situated towards the Middle of the Island *Nippon*, was once very large, rich, and magnificent, because the antient *Dayri*, who reigned alone in those Isles, resided there; but it was almost entirely destroy'd by Fire, during the Civil Wars of *Japan*. Since that Time a new Emperor, having appeased the intestine Divisions, by conquering all the petty Kings, or rather Tyrants, who had built their Thrones on the Ruins of that of the *Dayri*; he chose the City of *Jendo* for his Residence, and it passes at present for the Capital, and the most sumptuous City of *Japan*; for not only the Palace of the Emperor is cover'd over with

Plates of Gold, but also those in the Neighbourhood, belonging to several Princes.

Note, That the *Japanese* are quite different from us in their Manners: Tho' they be very patient, they are so wild, and so cruel, that a Foreigner dares not lift up his Eyes to look a single Soldier in the Face, without being in Danger of his Life: They are so mistrustful, that they will permit no foreign Ships, except the *Dutch*, to approach the Shore. When a *Dutch Ship* arrives in the Port, Commissaries come into it to examine every Sailor, and other Persons on board, apart, about News from *Europe*, the *Indies*, &c. and if any one be found a Liar, he runs a great Risque of being severely punished. Afterwards those Commissaries cause all the Munitions, and Merchandises, brought by the Ship to be carried away; then having examined their Value, they have the same Ship loaded with Gold and Silver to the Equivalent of those Effects, and as they think fit: And it may be observed, that one has not the Liberty to chuse the Species of Metal, but is obliged to take what is given him, and set sail as soon as they order them, without asking the Reason why: But however, the *Japanese* are faithful, and never deceive in Trade.

Note also, That the *Japanese* are govern'd by several Kings and Princes, who acknowledge a sovereign One, whom they call *Cube*, i. e. Commander or Emperor. The People have so great a Veneration for that Sovereign, that they dare not look him in the Face, and adore him as a God. He is never to be spoken to, but the Face prostrated against the Ground; and his natural Pride joined to his Magnificence, keeps them in that profound Respect. Their Government is despotick and very rigorous. The Lords have a Right of Life and Death over their Subjects; and for the least Fault, they make them feel the Effects of their brutish and wild Humour.

Note again, That the *Japanese* have always been Idolaters; but the *Portuguese* having discovered their Country in 1542. *St. Francis Xavier*, passed into it to preach the Gospel, and succeeded with so much Glory, that since that Time the Catholick Religion had made an almost incredible Progress in *Japan*; and notwithstanding the Persecution it had suffered from some of the Emperors, there was Hope, that all those People would increase the Number of the Faithful; if the Devil, Enemy of God's Glory, had not insinuated in the Mind of a certain *Flemish*, the Means to destroy in a very short Time the Church, which so many Martyrs had built by their Predications, and cemented with their Blood. This Emissary from Hell was born at *Brussels*; some say, that from a Scullion, or Marmiton, he was become Intendant of Commerce for the *Dutch* in *Japan*: Jealous, perhaps, of the *Portuguese*, who managed well their Affairs in those Parts, and considering them as an Obstacle to the Advancement of his own, he forged a Letter, which he pretended to have intercepted from on board one of their Ships, and which he shew'd the Emperor of *Japan*, that these *Portuguese* had conspired to render themselves Masters of his Country, by Means of the great Number of Catholicks who were in it. That Prince, as much inclin'd to Cruelty, as he was versed in Politicks, without examining the Accusation farther, gave secret Orders that all Christians in his Dominions, without Exception to Sex or Age, should be massacred, which was barbarously executed; so that the Catholick Religion is not only extinct in *Japan*, but this Letter has render'd the Name of *Portuguese* so odious to the People, that they have pull'd up all the Trees, Vines, and other Plants, these had brought from *Europe*; to keep nothing of a Nation which they believe perfidious. He who had been the Cause of so fatal an Accident, having been discover'd fraudulent, and without Faith in his Ministry, was depriv'd of his Commission, sent to *Holland*, and interdicted from Trading: But sometime afterwards he enter'd into the Service of the King of *France*, and

was the Cause that 25 Ships were either lost, or taken at the Island of *Ceylon*, and at *St. Thomé*, or *Maliaput*, on the Coast of *Coromandel*, where it is well enough known how he deceived the King: Afterwards returning towards *France*, and being afraid to appear there with the Riches he brought from *India*, and wanting to unload himself of some of his Jewels at *Lisbon*, he perished with them, and his Ship, on the Coasts of the Kingdom of *Portugal*.

A more particular Description of *Japan* is as follows:

The Island of *Nippon*, contains *Jendo*, *Meaco*, *Buomi*, *Ximano*, *Jechigue*, *Suranga*, *Boary*, *Sengomy*, *Aima*, *Bitçou*, *Bingo*, *Mimasaca*, *Hixumi*, *Hinami*, *Amangui*, *Hietchu*, *Hienchengo*, *Findaqui*, *Temba*, *Noto*, *Musaki*, *Simovefa*, *Fitachi*, *Villoxu*.

The Island of *XIMO*, contains *Satçuma*, *Arima*, *Cbicugo*, *Nangasaki*, *Burgo*, *Finga*, *Figen*.

The Island of *Xicoko*, contains *Tonfa*, *Hyo*, *Ava*, *Samuchi*.

The other ISLES are, *Firando*, *Cexima*, *Goro*, *Tanaxuma*, the *Seven Isles*, *Gisima*, *Toy*, *Sando*, *Sisima*, *Bacafa*, *Woqui*.

The PHILIPPINE ISLES.

These Isles, called by the Eastern Nations, Isles of *Luçon*, of the Name of the greatest and most considerable of them all have been called *Philippine*, by the *Spaniards*, of the Name of *Philip II.* King of *Spain*, under whose Reign they were discovered by *Magellan* in 1520.

They are situated between the *Molucca's*, and the Kingdom of *China*, and extend from the 5 Degree of Latitude to the 19, between the 151 and 167 Degree of Longitude.

Though they are very far advanced in the Torrid Zone, the Climate is not very hot, because of the long Nights, and of the Wind, which blows hard there very often: The Soil is extremely fertile in all Things; it produces Wheat, Barley, Rice, Millet, and excellent Wine; likewise Pepper, Ginger, Cinnamon, Saffron, Sugar, Honey, Wax, and several Sorts of Fruit. It has Mines of Gold, and of Iron; and they fish Pearls on the Coasts: It feeds all Sorts of Cattle and Fowls, as well as several Sorts of wild Beasts and Game: Crocodiles and Tortoises, whose Shells are the most esteemed of all the East for their Beauty.

Among these Isles there are three which are the principal and greatest, viz. *Luçon* or *Manilla*, *Mindanao*, and *Paragoya*, or *Calamianes*. The others which are lesser, and almost all comprised among these, are *Mindora*, *Kapul*, *Panajotton*, *Masbate*, *Abajo*, *Achan*, or *Tendaye*, *San-Juan*, *Matan*, *Cebu*, *Negoa*, and several others.

The Island of *Luçon*, which is the largest of all, is situated under the 159 Degree of Longitude, and the 15 of Latitude: It has more than 100 Leagues in its greatest Extent from South to North; almost as much from East to West, and more than 400 of Circuit, without including the Gulphs.

The Island *Mindanao*, which is the most Southern, is situated under the 163 Degree of Longitude, and the 7 of Latitude. It may have 120 Leagues in Length, 80 in Breadth, and 340 in Circuit without the Gulphs.

The Island *Paragoya*, called also *Puloan*, is the most western, the most fertile, and the best inhabited. It is situated under the 154 Degree of Longitude, and the 10 of Latitude, so that it may have more than 100 Leagues in Extent from South by West to the North by East, 18 or 20 in Breadth, and 200 of Circuit.

The Island *Mindora* is situated under the 158 Degree of Longitude, and the 13 of Latitude, and may have 45 Leagues in Length from South by East, to North by West, about 20 in Breadth, and 100 of Circuit.

The Island *Tendaye*, is Northward of *Mindanao*, under the 164 Degree of Longitude, and the 12 of Latitude: It has about 50 Leagues from South by East to North by West; 30 in Breadth, 140 of Circuit, without including its Gulph. It was the first *Magellan* boarded, and passes for one of the most fertile.

The others which I have marked are situated between these, and though they be smaller, they are not less considerable for their Fertility, and other Advantages.

Note, That the Inhabitants, native of these Islands, are not so wild as that of *Japan*, and trade with the *Chinese* and *Europeans*, without that insupportable Mistrust, with which the *Japanese* treat Foreigners; but they hate mortally the *Spaniards*.

The City of *Manilla*, is the Capital of those Islands which are in the Power of the King of *Spain*; it is situated in the Bottom of a Gulph in the Middle of the Island of *Luçon*: The Viceroy with the Consul resides there, and it is an Archiepiscopal See.

The City of *Mindanao*, otherwise *Tapone*, is the Capital of its Isle, to which it has given its Name: The most powerful of the Kings of those Countries reside there.

Note, That the *Catholic* Religion is professed in all the Places depending of the King of *Spain*. The Natives are either *Mahometans*, or Pagans; there are few of them Christians, who have been converted by the *Spaniards*.

Here follows a Catalogue of all the *Philippine Isles*.

The Isles of *Luçon*, *Manilla*, *Cagacan*, *Vigas*, *Aquarina*, *Panganfran*, *Panevasion*, *Cacaces*, *P. de Mandato*.

The Isle *Paragoya*, or *Calamianes*, or *Pulvan*.

The Isles of *Mindora*, *Kapul*, *Panajotton*, *Negoa*, *Musbate*, *Rebujan*, *Tindaye*, *Abajo*, *Cebu*, *Matan*, *S. Juan*, *Banton*, *Luban*, *das Palmas*, *Tagyma*, *Candagari*, *Damucan*, *Bankingle*, *Pondaim*, *Paracalla*, *Babayones*.

MOLUCCA ISLES.

These Isles, known under the Name of *Molucca's*, bear it improperly, because that Name has never been given to any other Isles, but to *Ternate*, *Tidor*, *Motir*, *Machian*, and *Bachian*, situated towards the western Coast of *Gilolo*, and which are nothing in Comparison of those generally called *Molucca's*.

They are situated Southward of the *Philippines*, and Eastward of *Borneo*, extending in our Maps from the 3 Degree of Northern Latitude, to 11 of the Southern; between the 155 and 180 of Longitude, the Land of the *Popous* included.

The Climate is hotter than in the *Philippines*, and they are not so fertile. They produce but little Corn, unless it be Rice, of which the Inhabitants make their Bread, and a sort of Wine: Their greatest Fertility is in Spices, as Ginger, Cinnamon, and particularly Cloves, which grow in great Quantity in the true *Molucca's*. The great ones have some Golden Mines, produce Cotton, and a great Quantity of Sanders.

Among the great Number of Isles called *Molucca's*, there are two of a great Extent, viz. *Celebes* and the Land of the *Popous*. There are several others lesser, among which are those of *Gilolo*, *Ceiram*, *Timor*, *Flores*, *Bouro*, *Banda*, *Marotay*, *Baton*, *Solayo*, &c. and others still lesser, among which are *Ternate*, *Tidoré*, *Motir*, *Machian*, and *Bachian*, which are the true *Molucca's*, which are found in this Order, coming from the North toward the South; the greatest of which has but 13 Leagues of Circuit, and the lesser 4 or 5.

The Island *Celebes*, is the largest and most western of the *Molucca's*: It is situated under the 2d Degree of Southern Latitude, and the 158 of Longitude. It may have about 150 Leagues in Length, 90 or 100 in Breadth, and 4 or 500 of Circuit, because of a great Gulph which is Southward. This Isle had once six Kingdoms, which since have been reduced to two. The first and most flourishing is that of *Celebes*, the other that of *Macasar*.

The Island *Gilolo*, is situated under the Equator, at the 165 Degree of Longitude. It is of an irregular Form, advancing four Slits of Land, one Northward, one towards the North by East, another Eastward, and the last towards the South by East. The largest of these Slits has not 20 Leagues in Breadth, and the longest has about 50 Leagues in Length from the Middle of the Isle to one of its Extremities.

The Island *Ceiram*, is situated under the 3d Degree, 30 Min. of Southern Latitude, and the 167 of Longitude. It may have 80 Leagues in Length, and 18 in Breadth.

The Island *Timor*, is situated under the 9 Degree, 30 Min. of Southern Latitude, and the 161 of Longitude. It may have 60 Leagues in Length, 20 in Breadth, and 130 of Circuit. Golden Mines are found in it, a great Quantity of Pepper, and the Sander-Tree.

The Isles *Flores*, *Solor*, *Teraſta*, *Banda*, *Amboina*, &c. have very near the Qualities of those above-mentioned. One has its particular King, and the others are in the Power of the *Portuguese*, or of the *Dutch*: They will be seen in my particular Description.

Note, That most of the Inhabitants of these Isles are brutish and wild, particularly those who inhabit the Middle of the Land, and have no Commerce with the *Europeans*. But the Inhabitants of the Coasts are very different from them, and much more tractable.

Note also, That the *Molucca's* were discovered by *Maggellan*. The *Spaniards* were the first who settled in them, but were expelled by the *Portuguese*, who were supplanted in their Turn by the *Dutch*, who are at present Masters of Part of them; and have so well managed the Kings of those Isles, that they are entire Masters of the Commerce of Cloves.

Note again, That the Natives are either Idolaters or *Mahometans*, few of them are baptized, and the *Dutch* and *Portuguese* follow each their Religion.

A more particular Description of the *Molucca's* is as follows:

The Island *CELEBES*, contains *Celebes*, *Durate*, *Bobol*, *Gaydeyca*, *Tetoli*, *Taninee*, *Gapæ*, *Tobuco*, *Buta*, *Supar*, *Ciaon*, *Mandor*, *Macasar*, *Bantachaia*, *Tabon*, *Tello*.

The Island *GILOLO*, contains *Gilolo*, *Moro*, *Cuma*, *Tolo*, *Jaffago*.

The Land of the *PAPOUS*.

The Isle of *CEIRAM*, contains *Ceiram*, *Cambello*, *Loe*.

The True *MOLUCCA's* are *Ternate*, *Tidore*, *Motir*, *Machian*, *Bouchian*.

The Isles of *MOROTAY*, *Ouby*, *Bilato*, *Xulla*, *Bouro*, *Banda*, *Baton*, *Gabona*, *Solayo*, *Flores*, *Timor*, *Ambo*, *Teralta*, *Aru*.

ISLES OF THE SONDE.

We do not know, for certain, the Origin of the Name of these Isles, and I am of Opinion, that it is taken from the Port of *Bantam*, called *the Sonde*.

They are situated round the Equator, Westward of the *Molucca's*, and very near the *Indian Peninsula* beyond the *Ganges*; and extend between the 8 Deg. of northern Latitude, and the 8 of the southern Latitude, between the 13 and 134 of Longitude.

The Climate is temperate enough, considering they are situated in the Middle of the Torrid Zone; and the Soil is very fertile in Metals and Spices.

Among the Isles known by the Name of *Sonde*, there are three principal ones, *viz.* *Sumatra*, *Java*, and *Borneo*.

Note, That the Natives of these Isles are not very sociable, particularly in the Middle of the Land; for those on the Coasts are tractable enough.

Note also, That they are govern'd by different Kings or Princes: The *Dutch* are Masters of several Places on the Coast, and likewise of the whole Commerce of those Isles.

Note again, That these Kings, and their Subjects, are either Idolaters or *Mahometans*; and the few *Christians* found among them are all *Europeans*.

The Island *SUMATRA* is the most western of the three, separated from *Molucca* by the Streight of the same Name. It extends from the 5 Deg. 30 Min. of northern Latitude, to the 5. 30 Min. of southern: So that

the Equator passes just in the Middle; and it may have 300 Leagues in Length, 40 or 50 in Breadth, and about 600 of Circuit.

Though this Island be under the Line, the Climate is not excessively hot; either because the Nights are equal to the Days, or for the fresh Gales which blow from all Parts. The Soil produces a great Quantity of Pepper, Ginger, Cinnamon, and Rice which the Natives eat instead of Bread; and likewise Sugar and Benzoin. It has in its Mountains several Mines of Gold, Silver, Lead, Iron, and Sulphur.

This Island was once divided into several Kingdoms; at present it has but five, *viz.* *Achem*, *Campfer*, *Jambi*, *Palyman*, and *Menancabo*. The two first are Northward, and the three others Southward. The Kingdom of *Achem* is the largest, and most Northern of all. The *Dutch* possess several Places on the Coasts, with Part of the Mines.

The City of *ACHEM*, Capital of its Kingdom, is the most considerable of the whole Island, and situated towards the most northern Point.

The Island *JAVA*, called the *Great*, is at the South by East of *Sumatra*, from which it is separated by the Streight of the *Sonde*. It is situated under the 7 Degree of southern Latitude, between the 140 and 150 Deg. of Longitude; so that it has more than 200 Leagues in Length, 40 in Breadth, and 450 of Circuit.

The Climate is the same as at *Sumatra*, for the Reasons above-mentioned. The Soil produces several Sorts of Fruits, Pepper, Benzoin, Sugar, and Rice, which the *Javans* eat instead of Bread. It has likewise Mines of Gold and Copper.

It was antiently divided into nine Kingdoms, which have been since reduced to two. The first and most powerful is that of *Materan*, the King whereof is called Emperor of *Java*, to whom all the other Princes are tributary; and the second is that of *Bantam*.

The City of *MATARAN* is the Capital of the Island, and the Place of the King's Residence. It is situated on the southern Coast.

The *Dutch* have built *BATAVIA* on that Coast, in the Manner of the Cities of *Europe*. It is one of the Rarities of the Country, because all the Houses of the other Towns are but of Wood, cover'd with Leaves of Palm-Trees. Here resides the General, kept by the *Dutch* in these Isles, and for the *Indies*. They have besides a Fortrefs on the same Spot of Ground, where was before the City of *Jacatza*.

Note, That before this Fortrefs was built, the *Dutch* were disturbed in their Establishment by the Natives supported by the *English*; but they defended themselves so well, by Means of a Fort they built with Bale Goods, that they repulsed their Enemies, and afterwards built this Fortrefs, composed of four Bastions, to which they gave the Names of precious Stones, *viz.* of the *Diamond*, *Ruby*, *Saphir*, and *Pearl*, in Allusion to the Goods they had built their first Fort with.

The Island *BORNEO*, is situated under the Equator, Eastward of *Molucca* and *Sumatra*, and Northward of *Java*. It extends as far as to the 7 Deg. 30 Min. of northern Latitude, and as far as to the 4 of southern; having about 220 Leagues in Length, 200 in Breadth, and 650 in Circuit.

The Climate is temperate enough, but unwholesome, because of the Marshes which exhale bad Vapours. It has Mines of Gold, Tin, and Iron in its Mountains; Wax, Honey, Cassia, and Cotton in its Forests, which are very large, and pretty frequent.

There are Southward, and Westward, four pretty large Rivers, the most remarkable of which is, that of *Succadano*, which traverses three Quarters of the Island, from North to South, and in which it is said are found Diamonds.

Note, That this Island is govern'd by a *Mahometan* King, to whom no Body dares to speak Face to Face. The Natives are most of them Idolaters, and some follow the

the Religion of the Prince. The *Dutch* keep some Places on the Coasts, where they profess their own Religion.

BORNEO, is the Capital of the whole Island, from which it has borrow'd its Name. It is situated at the Bottom of a small Gulph, towards the Coasts which looks North by West; and is the King's Residence.

Here follows a more particular Description of the *Isles of Sonde*.

SUMATRA, contains *Achem, Pedir, Pacem, Tamon-bura, Souzon, Baras, Terra d'Aru, Bathan, Camper, Potemban, Priamam, Gudabiri, Jawbi, Baros, Palimban, Menancabo, Judapera*.

JAVA, contains *Batavia, Bantam, Materan, Seraboy, Japara, Greve*.

BORNEO, contains *Borneo, Cancerao, Marudo, Mandan, Puchavaraon, Tamenacerin, Tamanatos, Soucelouhan, Hormata, Succadano, Lave, Bendarmassin, Taniamparo, Calandua, Caburo*.

The *Isles of BANCA, Madura, Baly, Nassaw, Gade fortuin, Nays, P. Gavia, Cocos*.

The Island CEYLAN, or ZEYLAN.

The *Island CEYLAN*, to which has been given the Figure of a Pear, is the *Taprobanes* of the Antients, and that which the *Indians* call *Tenarishn*.

It is situated Eastward of Cape Comorin, under the 122 Degree of Longitude, and the 8 of Latitude, and may have 80 Leagues in its greatest Extent from South to North, about 55 from East to West, and 230 of Circuit.

It is separated from the Coast of *Coromandel*, by the Streight of *Manar* or *Chilao*, which borrows its Name from one or other of these two Isles, which are along its western Coast.

The Climate is very temperate, though so near the Equator; and the Soil very fertile in all Things necessary for Life. It produces a great Quantity of Nutmegs, and other Spices: The best Cinnamon grows there in Abundance, since there are seen whole Forests of it. Some say that it has Mines of Gold and Silver, though there is no Commerce made of it; but a great Quantity of fine Pearls are fished in the Streight.

It has but few Rivers, and the two most remarkable are, those of *Trinquemale*, and of *Colombo*, which have their Source towards the Middle of the Island, five or six Leagues distant from one another. They run contrarywise, one to the North by East, the other to the South by West. The first which passes at *Candea*, and is the greatest, has not 40 Leagues in Length.

This Island was once divided into eight or ten Kingdoms, which are at present all re-united under the Domination of a Sovereign, called King of Ceylan, who resides at *Candea*, Capital of his Dominions. That City is situated towards the Middle of the Island, on the River *Trinquemale*.

The King of Ceylan has several Princes his tributary; the *Dutch* are Masters of all the Coasts of this Island, and consequently of the whole Commerce. Most of the Places on the Coasts have been built by the *Portuguese*, who had settled there; but it is pretended that they committed so many Cruelties, that their Name became odious to the Natives; which being come to the Knowledge of the *Dutch*, they made a League with the King of Ceylan, beat the *Portuguese* in several Encounters, and at last expelled them entirely from the Island, after they had made *Gaspar Figbero* their Chief, Prisoner, whom they confin'd in a Dungeon.

Note, That the King, Princes, and most of their Subjects are *Mahometans*, and but few of them Idolaters.

The *Dutch* profess their own Religion.

ISLES MALDIVE.

These ISLES borrow their Name from *Male*, which is the greatest, and Capital of them all; and from *Dive* an *Arabick* Word, which signifies *Isle*, as if one would say the *Isles of Male*.

They are situated towards the Middle of the Torrid

Zone, so that they advance from South by East, to North by West, on an almost strait Line, between the 3 Degree of southern Latitude, and the 7 of northern, taking up in Length about 240 Leagues, and 15 or 20 in Breadth.

The Climate is not too hot, though under the Line, because of the long Nights, during which a Dew falls which temperates the Heat of the Day. The Soil produces but little Corn, except it be Millet. But it abounds in Fruit, as Oranges, Lemons, Figs, and a great Quantity of Cocoa-Nuts. There are brought over from these Islands, the finest Tortoise-Shells of all the *Indies*, black Coral and Ambergrease.

These Isles are divided into thirteen or fourteen Cantons, if we reckon the most meridional for two, because it is divided into two by a Brook; all the other Cantons are separated from one another by very dangerous Channels, three, six, or ten Leagues broad; and the last is twenty Leagues broad. Each of these Cantons is environ'd with Banks of Stone, which stop the Impetuosity of the Sea; so that those Isles enjoy a great Tranquility, even during the most furious Tempest. The greatest Canton has but 50 Leagues of Circumference, round-wise, or oval-wise; notwithstanding which it contains an innumerable Number of small Isles, the most extended whereof has but 2 Leagues of Circuit. Round each Canton there are four Apertures or Conducts, through which one may pass from one to the other, in pretty reasonable Ships.

The greatest of these Isles is *MALE*, which is the Capital of all: It is situated in the sixth Canton, which is found in descending from North by West, to South by East: The King of these Isles resides there.

ISLES OF THE LARRONS.

These Isles are called of the *Larrons*, because their Inhabitants are addicted to Thieving.

They are situated between the 7 and 21 Deg. of Latitude, and confin'd between the 184 and the 188 of Longitude, in a Place of the Eastern Ocean, called the *Archipelago of St. Lazare*.

It is said that they are sterile, and the Inhabitants very poor.

Here follows a more particular Description of all these Isles.

The *Island CEYLAN*, contains *Candea, Colambo, Gallo, Baticale, Trinquemale, Jasomapatan, Chilao, Jela, Ceitavaca, Manar, Isle*.

The *Isles MALDIVE*, are *Tilladou-Matos, Milladoüe, Madoüe, Paindoüe, Pouladou, Malos-Madou, Ari-Atolon, Pouliddou, Moluque, Nillondoux, Collomadoux, Adoumatis, Souadou, Addou, Poüe-Moluque*.

The *Isles LADRONES*, are *Gregua, Chemocoa, Manao, Englese, Malabrigo, Difierta, Oramagan, Agan, Bacim, Botaba, Volid, Sepan, Mata, Chereguan, Natan, Guguan*.

The other *Isles* in those Parts are, *I. of the Senators, I. of the Martirs, I. of Birds, Pulovilan, De los Arcifos, De los Matelotes*.

A F R I C A.

This Part of the ancient World is the most southern of all those it is composed of, and the greatest Peninsula of the Universe. Most Authors differ in Sentiment on the Origin of its Name; some borrow it from *Afer*, Son or Companion of *Hercules* the *Libian*; others derive it from the Name of a King of *Arabia*, called *Melec Isfriqui*, which Foreigners have corrupted, changing the *I* into *A*. *Josephus* assures us, that the Word *Africa* comes from *Afer*, *Abraham's* Grandson. There are several other Opinions, which would be too tedious to relate, and are as dubious as these.

It extends from the 35 Deg. of northern Latitude, to the 35 of southern Latitude; and from the 3 Deg. of Longitude, to the 83; so that it may have 1600 Leagues in Length, at the Altitude of the River *Niger*, about

about half under the Equator, and always diminishing as one goes Southward: It has very near 1400 Leagues in Breadth, towards the Lake *Zaire*, and about 600 in *Guinea*; therefore it is believ'd to have more than 5000 Leagues of Coasts.

It confines Northward with the *Mediterranean*; Eastward with the Isthmus of *Suæ*, the *Red Sea*, and the Eastern Ocean; Southward with the Sea of *Ethiopia*; and Westward with the *Atlantick*.

Its Situation shews us, that the Equator passes justly in the Middle, and that two Thirds thereof are in the torrid Zone, which renders the Climate extremely hot: Add to this, that the Middle of the Country is full of shining Sand, which reflects the Rays of the Sun with a burning and insupportable Heat. All this sandy Land is uncultivated, and very little inhabited, either for its Sterility, or its Scarcity of Water, or because it abounds with ferocious Beasts, and several Monsters of various Forms, which devour human Creatures: Among these Animals are found the Lion, the Leopard, the Panther, the Elephant, the Monkey, the wild Horse and Ass, the Sea-Ox and Horse, the Camel, and several others unknown, the Sheep, Oxen, &c. are very good, and extraordinary large and fat. The Soil produces delicious Fruit, and medicinal Plants: It has in several Places Mines of Gold and Silver, and some of Salt.

Its most considerable Rivers are the *Nile* and the *Niger*; the first springs from the Lake *Zaire*, or from a small River which enters into it in *Abyssinia*, which it traverses from South to North by East; as it does *Nubia* and *Egypt* from South to North. It disembogues into the *Mediterranean* through several Mouths, after it has divided itself into several Branches, which form a Triangle, call'd the *Delta* of *Egypt*, because it has very near the Form of that *Greek* Letter. The *Niger* takes its Source from a Lake of the same Name in *Abyssinia*, runs from South to North between that Empire and the Kingdom of *Congo*; then entering the Kingdom of *Borno*, loses itself in the Mountains, then appears again near the Lake *Borno*, through which it passes, and traverses afterwards all *Nigritia* from East to West, forming the Island which the *Arabs* call *Nub*, between *Gangara* and *Zanfara*, and the Lake *Guarda*, in the Kingdom of the *Agades*; then, before it disembogues into the Ocean, it divides itself into several Branches, the most considerable whereof are *Rio Grande* Southward, *Gambia* in the Middle, and *Senega* Northward: The most southern Point of the Island, formed by these two last, is what we call the *Cape Verd*.

AFRICA may be divided into eight principal Parts, which are *Egypt*, *Barbary*, the *Bildulgerid*, *Zaara*, or the *Desart*, *Nigritia*, *Guinea*, *Ethiopia*, and *Nukia*; to which may be added, for a ninth Part, the Isle depending thereof.

Note, That though this Country seems to produce but Barbarians and Monsters, it has notwithstanding given Birth to the greatest Lights of the Church, and most strenuous Defenders of it, as *Tertullian*, *St. Cyprian*, *St. Augustin*, and several others; and also several great Captains, as *Hannibal*, &c. The Inhabitants are a Mixture of native *Africans*, and of *Arabs*: They are in general of a wild and cruel Temper, and very strong: They do not all live in Cities, but a great Number dwell in the Desarts, under Huts; and some are always Vagabonds.

Note also, That ever since the Children of *Noah*, *Africa* has had several Kings and Princes. The *Romans* render'd themselves Masters of a Part of it; and after they had destroyed *Carthage*, and expell'd the Kings, they sent Colonies into it; till *Genferick*, King of the *Vandals*, expell'd them, and render'd himself absolute Sovereign there. He maintain'd his Empire, he and his Successors, for the Space of about 130 Years, till *Belisarius*, General of the Army of the Emperor *Justinian*, reconquer'd that northern Part from *Gilimer*, whom he carried away Prisoner, after the Reduction of *Carthage*. The *Arabs* and *Saracens* invaded it in their Turn, under the Empire of *Honorius*; during which the *Roman* Affairs began to decline. Since

that Time, the *Turks* have conquer'd some Kingdoms in it, Part whereof is subject or tributary to them. Other Kings, or Sovereigns, possess the best Part of it; and the Kings of *Spain* and *Portugal* have some Places on the Coasts.

Note again, That the *Africans* were always Idolaters, and adored the Stars, the Fire, &c. The Queen of *Sheba*, who visited *Solomon*, instructed them in the *Jewish* Religion; and they received afterward the Light of the Gospel from the Eunuch of Queen *Candace*, who was baptized by the Apostle *St. Philip*. At present there are found in it Mahometans, Idolaters, Castes, *Jews*, and two Sorts of Christians: For most of the *Abyssinians*, and other *Ethiopians*, are *Greek* Schismatics; and the Subjects of the Kings of *Spain* and *Portugal* are *Roman* Catholics.

E G Y P T.

This Kingdom has received its Name, according to the most common Tradition, from a Son of *Belus*, *Danai's* Grandson, who was called *Egyptus*.

It extends from the 60 Degree of Longitude to 67, and from the 22 of Latitude to 31, 30 Min. so that it may have near 100 Leagues of Extent from East to West, and 180 from South to North.

It confines Eastward with the *Red Sea*, and the Isthmus of *Suæ*; Northward with the *Mediterranean*; Westward with *Barbary* and the Desart of *Barca*; and Southward with *Nubia*, and the *Abyssinians*.

The Climate of *Egypt* is unwholesome, because of the excessive Heats, and the Waters of the *Nile*; for the Water which remains on the Earth after the overflowing of that River, generates a prodigious Quantity of Insects of different Species, which infect the Air. But in Recompence, all the Cattle becomes more fecund by those Waters; the Sheep bear twice a Year, even several Lambs at once. The Women are commonly delivered of two Children at a Birth, and often more. Some Authors believe that the Fecundity of the Women of *Israel*, during their Captivity, proceeded from the Water of the *Nile* they used to drink. The Trees are almost always covered with Fruit; and if the Inhabitants were not so lazy, and would till and sow their Land after Harvest, they could make two in a Year.

The famous River *Nile* is the only one considerable in *Egypt*. It abounds with Fish; but it likewise produces a great Number of Crocodiles, which are very dangerous to Men and Beast, whom they devour when they can surprize them: It traverses the whole Kingdom from South to North, forming several Isles, and passing through the most considerable Cities, as *Girgio*, *Saida*, *Manfelont*, *Benesuef*, *Fium* and *Cairo*. Afterwards it divides itself in two Arms, which subdivide themselves in several others, which have all different Names, and form the *Delta*.

Westward of the *Nile*, under the 29 Degree of Latitude, is found the Lake *Meris*, which may have 160 Leagues of Circuit; and another a little higher, which is about 20 or 25 Leagues round. The Isthmus of *Suæ*, which parts the *Red Sea* from the *Mediterranean*, is 30 or 35 Leagues broad. Several Kings of *Egypt* have attempted in vain to cut it, to join the two Seas together. This Enterprize has render'd it famous in History, and has given Room for the Proverb, *Fodere Isthmum*, to a difficult Undertaking.

Four Leagues off *Cairo*, are seen the three famous Pyramids, which have passed for one of the Seven Wonders of the World: The greatest of these Pyramids has 86 Fathoms, 4 Feet in Length; each Side of its Base has 113 Fathoms, 4 Feet; and each Face of its Pedestal is 270 Fathoms, 5 Feet long. The Mummies found in the Neighbourhood of these Pyramids, and which have been the Subject of so many Romances, are nothing but embalmed Corpses, hardened by Succession of Time.

Egypt is divided into higher, middle, and lower, and more particularly into twelve *Calliwicks* or Prefectures, which are found situated in the following Manner.—First, between the *Nile* and the *Red Sea*, are inclosed the Government of *Cairo*, and the *Calliwicks* of *Cosfir* and *Cher-*

Cbersteffe: The Country called *Saida* extends Southward, and contains Westward the *Calliwick* of *Girgio*, and Eastward that of *Minio*, those of *Monfelont*, *Benesuef*, *Fium*, and *Geza*, which are also Westward of it. The Government of *Alexandria*, the *Calliwicks* of *Calliconbich*, of *Menoufæ*, and of *Garbia*, are on the *Mediterranean*, taking up the whole Extent of the *Delta*: Lastly, that of *Mansoura* is on the Isthmus of *Suæ*s.

In the Time of *Ptolomeus*, the City of *Alexandria* was the Capital of *Egypt*; but *Cairo* possesses at present that Advantage. This City is situated on the Border of the *Nile*, over-against the Ruins of the antient *Memphis*, which was on the other Side, and incloses within its Circuit the antient *Babiba* of *Egypt*, according to *Burchard's* Sentiment: It is the Seat of a *Bashaw*, sent thither by the *Porte*.

Note, That the *Egyptians* are witty, and dextrous, but very lazy, and great Epicures. The Invention of *Arithmetick*, *Geometry*, *Astronomy*, and several other Arts, is attributed to them. It is certain that they have cultivated the Sciences more than any other People in the World. They invented *Geometry*, to remedy the Disorders caused by the Inundation of the *Nile*, which carried away, or defaced the Bounds which distinguished the Estates of each particular Person: So that by Means of this Art, the Extent of every one's Possessions was restored to him, when the Waters were retired.

Note also, That this Kingdom was a long Time governed by Kings. The first were of the Race of the *Pharaoh's*; *Cambyfes*, King of *Persia*, conquer'd it; and after him *Alexander the Great*. Afterwards it became the Portion of the *Ptolemy's*, till the *Romans* render'd themselves Masters of it, at *Cleopatra's* Death. They possessed it till *Omar*, second Calif of the Successors of *Mahomet*. *Saladin* established it in the Empire of the *Mamalukes*, which lasted till 1516, when *Selim* Emperor of the *Turks* conquered it, and killed the last Soldan: Ever since that Time it has remained in their Possession, and is governed by a *Bashaw*, who resides at *Cairo*.

Note again, They were always so over-religious, that they became at last superstitious: At first they were Idolaters; afterwards they received the Light of the Gospel in the Apostles Time, and *St. Mark* was the first Bishop of *Alexandria*: They suffer'd afterwards, through their natural Inconstancy, that their Faith should be corrupted by Heresies, and most of them are at present *Mahometans*; and the few *Greek* and *Latin* Christians, found among them, are very much corrupted.

A more particular Description of *Egypt* is as follows:

The Government of *CAIRO*, contains *Cairo*, *Suæ*s, *Larnabula*, *Emelcocena*.

The *Calliwick* of *COSSIR*, contains *Cossir*, *Zebith*, *Buge*, *Libelezaita*.

The *Calliwick* of *CHERKEFFI*, contains *Cberkeffi*, *Almona*, *Anthemum*.

The *Calliwick* of *GIRGIO*, contains *Girgio*, *Saida*, *Barbanda*, *Asna*.

The *Calliwick* of *MINIO*, contains *Minio*, *Jebmina*, *Chana*, *Assuana*.

The *Calliwick* of *BENESUEF*, contains *Benesuef*, *Memia*.

The *Calliwick* of *MANFEOATA*, contains *Manfeloata*, *Aziokia*.

The *Calliwick* of *Fium*, contains *Fium* only.

The *Calliwick* of *GEZA*, contains *Geza*.

The Government of *ALEXANDRIA*, contains *Alexandria*, *Rofeta*, *Bochira*, *Turamania*.

The *Calliwick* of *CALLICOUBIEH*, contains *Callicoubich*, *Turbota*, *Juga*.

The *Calliwick* of *MANOUFIA*, contains *Manoufia* only.

The *Calliwick* of *GARBIA*, contains *Garbia*, *Damieta*, *Beltina*, *El-mala*.

The *Calliwick* of *MANSOURA*, contains *Mansoura*, *Faranuda*, *Sabidum*.

B A R B A R Y.

Without amusing myself to give here the Origin of the Name of *Barbary*, which is as dubious as that of *Africa*, I'll only say, that it is the most northern Part thereof.

It extends along the *Mediterranean*, from the 9-Degree 30 Min. of Longitude, to the 60; and from the 27 of Latitude, to the 35, 30 Min. so that it may have very near 900 Leagues in Length, and only 80 in its greatest Breadth.

It confines Eastward with *Egypt*, Northward with the *Mediterranean*, Westward with the *Atlantick* Ocean, and Southward with the *Biledulgerid*.

It is esteemed the most considerable and most illustrious Part of *Africa*, and is likewise the best inhabited. The Climate is temperate enough: The Soil produces Corn, Maiz, and excellent Fruit. It feeds beautiful Horses and Cattle, whose Leather is much esteemed; and a great Quantity of Coral is fished on the Coasts.

It is divided at present into six Kingdoms, called of *Barca*, of *Tripoli*, of *Tunis*, of *Algier*, of *Fez*, and of *Morocco*; which are found in this Order going from East to West, on the Coasts of the *Mediterranean*, except the last, which is on the Ocean, at the South by West of that of *Fez*.

The Kingdom or Country of *Barca*, is situated between *Egypt* and the great *Syrtis*, called *Seiches* of *Barbary*, and contains about 30 Leagues of Coasts, and 30 or 40 in Breadth.

This Country is very sterile and full of Rocks: It is bathed by the Rivers *Nachel*, *Dokra*, and *Melela*, which spring from the Mount *Mæyes* in the Desert. The first divides the Kingdom in two Parts, and the two others are in the western Part, which is less wild, and in which there are several Cities, as *Barca*, which has given its Name to the Country, and is the Capital; *Cairoan*, antiently the Capital of a Kingdom, *Camera*, &c. in the Eastern Part called *Bachera* are several Ports, but there is no considerable City but that of *Alberton*.

Note, That this Kingdom depends of the Grand Signor, who keeps a Sangiack at *Barca*. He does not draw a great Revenue from it, because the Land is sterile: The Inhabitants are *Mahometans*.

The Kingdom of *Tripoli* is situated between that of *Tunis*, and the Country of *Barca*, extending about 250 Leagues on the Coast, from the Mouth of the small River of the *Salins*, in the great *Syrtis*, or Gulph of *Sydra*, as far as to that of the *Capes*, or little *Syrtis*: Its Breadth is very irregular, of 15, of 25, and of 40 Leagues.

This Country is divided in two by the River of *Tripoli*, on which is the City of the same Name, which is the Capital. This City is the Seat of a *Bashaw* who has no sovereign Authority, because it is governed in form of a Republick, which is only under the Grand Signor's Protection. It serves also for a Retreat to several Pyrates, who have no other Profession than to scour the Sea, living on Rapine, making a publick Commerce of their Theft, and of the Slaves they make in the Ships they take.

In the eastern Part, which is almost deserted, except the Coasts, are found these four Rivers, viz. the *Tessura*, *Macer*, *Mistrata*, and that of *Salins*; and though the Bottom of the Gulph of *Sydra*, be at least 60 Leagues broad, none of them falls into it. In the western Part, besides the River of *Tripoli*, are found those of *Rafamalbasa*, of *Portera*, and of *Casarnacara*. These, as well as the first, spring from Mount *Atlas*, in the *Biledulgerid*. There is found in it likewise the Mount *Nufuse*, between the River *Portera*, and that of the *Capes*; and several large Forests.

The Kingdom of *Tunis*, is situated between that of *Algier* and the little *Syrtis*. Its greatest Length from East to West is of about 70 Leagues, and its greatest Breadth 90.

The *Guadalbarbar*, bathes its most western Part, springing from the *Biledulgerid*; after it has divided it-

self into two Arms, the most western thereof runs so Serpent-like, that in the Extent of a strait Line of about 25 Leagues, one would make more than 90, if one would follow its Shore. The other Arm is called *Magrida*. The other Rivers are *Magerada*, *Capallia*, &c. which spring from it.

The City of *TUNIS*, Capital of this Kingdom, is at present like *Tripoli*, the Retreat of several Pyrates: Its Port is advantageously situated, at the Bottom of a Gulph. Its Entrance, which is narrow, is defended by the Fort *La Goulette*. It is also govern'd in Form of a Republick, under the Protection of the Grand Seignior.

The Isles *Galata*, *Panthalarea*, *Lampedusa*, *Limosa*, *Cberchara*, *Gamelera*, and some others, are Dependencies of this Kingdom.

The Kingdom of *ALGIER*, is situated between that of *Tunis*, and that of *Fez*. Its greatest Length is of about 220 Leagues, and its Breadth of 80 or 90.

This Country is full of high Mountains, particularly Southward, where it is confined by a Part of Mount *Atlas*.

Among its Rivers are found the great one, which springs from the Lake *Mezzal* in the *Biledulgerid*, and traverses Mount *Atlas*; the others, which comes from that Mount, are the *Titnes*, *Seslisas*, *Miromus*, *Sefaya*, &c.

This Kingdom is divided into five Provinces: First that of *Algier* is in the Middle; that of *Bugick* Eastward of it; that of *Constantine* is likewise Eastward of this; that of *Tenese* is Westward of *Algier*; and that of *Tremesin*, or *Tellenfin*, is the most Eastern.

The City of *ALGIER*, which is the Capital, is also govern'd in Form of a Republick, under the Protection of the Grand Seignior, who has not the least Authority in it. It serves likewise for a Retreat to Pyrates, among whom the famous *Barbaroussa* alarm'd the *Mediterranean* during the Reign of the Emperor *Charles V*.

The other Cities are situated on the Coasts, except *Tremesin*, which is 6 or 7 Leagues more advanced in the Country, and *Constantine*, which is an Island made by a River towards the Middle of its Province. The King of *Spain* keeps *Marsalquivir*, and *Oran* on the Coast.

The Kingdom of *FEZ*, which is Part of the antient *Tingitana Mauritania*, is situated between that of *Algier* and the Ocean. Its greatest Length is of about 120 Leagues, and its Breadth, as far as to the Streight of *Gibraltar*, of 90.

It is separated from the Kingdom of *Algier*, Eastward, by the River *Mulvia*; at South by West the *Ommirabi* parts it from *Morocco*; and Southward, Mount *Atlas* divides it from the *Segelakeffe*.

This Country is the best cultivated, and most inhabited of all *Barbary*; and though it be full of Mountains, several pretty large Cities are found in it towards the Middle.

This Kingdom is divided into seven Provinces, situated thus, first *Fez*, *Asgar*, and *Temesne*, are on the Ocean; *Habat* on the Streight; *Errif* and *Garet*, on the *Mediterranean*; and *Chaus*, which contains almost half the Country, is farther in the Land.

FEZ is the Capital, and is situated in the Middle of the Kingdom, on the small River *Union*, between *Suba*, and *Bunasar*. This City passes for one of the fairest of the whole World, and for the Ornament of all *Africa*.

Note, That this Kingdom is govern'd by a King, who styles himself Emperor of *Africa*, King of *Morocco*, *Fez*, *Sus*, and *Tafilet*, Lord of *Gago*, *Darc*, and *Guinea*, Grand Xerif of *Mahomet*, &c.

The King of *Spain* keeps some Places on the Coasts, as *Ceuta*, *Pennon de Velez*; the Portuguese are Masters of *Cazar Ezagbir*, and the English were once possessed of *Tangier*.

The Kingdom of *Morocco*, which is the other Part of the *Tingitana Mauritania*, is situated at the South by West of that of *Fez*, between the *Segelwelse* and the *Atlantick Ocean*.

Its greatest Length is of about 120 Leagues, from

Cape *Non* to the Mountains which part it from the *Sigelmeke*; and its greatest Breadth is of about 110, along the Coasts of the Ocean, from the same Cape to the Mouth of the *Ommirabi*.

Its Rivers are the *Ommirabi*, *Tensif*, *Sus*, *Cuadelhahi*, which disembogue into the *Ommirabi*, and the *Affimeal*, which runs to the *Tensif*.

The Soil is fertile in Corn, Fruit, Oil, and Sugar; delicious Grapes, whose Grains are as big as Pigeons Eggs, are found in some of its Mountains; and it has Mines of Gold, Silver, and Copper.

This Kingdom is divided into seven principal Provinces, which are *Morocco*, *Hascora*, *Tedles*, *Duocalia*, *Hea*, *Sus*, and *Guzalu*. In the Middle are found those of *Morocco*, and of *Hascora*, separated by the River *Tensif*, leaving the first at South by West, and the other at North by East; that of *Tedles* is Eastward. In following the Coasts from North to South by West, are found in this Order those of *Duccala*, *Hea*, and *Sus*.

The City of *Morocco*, situated near the River *Tensif*, is the Capital of this Kingdom, and was once the Seat of the antient Xerifs, whose Empire contain'd the *Tingitania Mauritania*, i. e. the Kingdoms of *Fez* and *Morocco*, with their Dependencies.

These two Kingdoms are under the Domination of the same King.

Note, That the Kings, Princes, and People of *Barbary*, are all *Mahometans*.

A more particular Description of all these different Kingdoms, is as follows:

The Kingdom of *MOROCCO*.

MOROCCO, contains *Morocco*, *Tefrastra*, *Delgumuba*, *Temmella*, *Imegiagen*, *Elgiumba*, *Tumeglafa*.

HASCORA, contains *Helmadina*, *Tagodast*, *Elgiumuba*, *Bro*.

TEDLES, contains *Tefza*, *Tedza*, *Efza*, *Cithiteba*, *Eithiad*.

DUCCALA, contains *Azafa*, *Azamor*, *El Medina*, *Mazagan*, *Temeracosta*.

HEA, contains *Tediust*, *Teculeth*, *Hadequis*, *Tejenth*, *Tegtasse*, *Culejat*, *Tefethna*.

SUS, contains *Tarodant*, *Messa*, *Tejutha*, *Tagavast*, *Tedfa*, *Guargessea*.

YDAUSQUERIT, contains *Aytiacoli*, *Ydeunadag*, *Ydiausan*, *Samotama*, *Deufeniz*.

EXTUCCA, contains *Ydaubagul*, *Hilela*.

GUZULA.

The Kingdom of *FEZ*.

FEZ, contains *Fez*, *Mechnese*, *Sala*, *Mahmora*, *Tefelta*, *Fanzara*, *Javia*.

ASGAR, contains *Elgiumba*, *Casar-Elcibir*, *Lor-rache*.

TEMESNA, contains *Rabat*, *Almansor*, *Hainelchalla*, *Anfa*, *Beniz*, *Adendum*, *Tegagita*.

HABAT, contains *Arzille*, *Tangier*, *Cazar-Ezzagbir*, *Ceuta*.

ERRIF, contains *Gomer*, *Terga*, *Bedis*, *Mezemma*, *Pennon de velez*, *Tegazza*, *Cbersera*, *Guasevala*.

GARET, contains *Melela*, *Chafasa*, *Jaffarine*, *Futis*, *Tarfogarel*, *Aleudia*.

CHAUS, contains *Tezza*, *Temrint*, *Dubdu*, *Garfis*, *Hadaggia*, *Gberselvin*, *Sofroa*, *Berubachlula*.

The Kingdom of *ALGIER*, contains *Algier*, Prov. *Miroma*, *Mazura*, *Teddeles*, *Carbona*, *Bugie*, Prov. *Steffa*, *Gigeri*, *Choll*, *Labez*, *Constantine*, Prov. *Tebessa*, *Bona*, *Tabarca*, *Stora*, *Tenese*, Prov. *Mustagan*, *Brischa*, *Sargel*, *Meliana*, *Telensin*, Prov. *Ilumain*, *Marsal-quivir*, *Oran*, Bishop. *Mazagan*.

The Kingdom of *TUNIS*, contains *Tunis*, *Goulette*, *Carthage*, ruinat. *Biserte*, *Rasimilara*, *Beija*, *Musli*, *Marmagen*, *Urbs Camuda*, *Sousa*, *Hamametba*, *El-Media*, *Cayroan*, *Meschiani*, *Baghani*, *Cassa*, *Nasta*.

ISLES, *Panthalarea*, *Limosa*, *Lampedusa*, *Cbercara*, *Gamelera*, *Galata*.

The Kingdom of *TRIPOLI*, contains *Tripoli*, *Tripoli-vechio*, *Elhamma*, *Capes*, *Joara*, *Portata*, *Raselmubesa*, *Sarmana*, *Horoze*, *Tessuta*, *Ragamitura*, *Lepeda*, *Brate*, *Subeoco*, *Naiena*, *Arcudia*.

ISLES Gerbes, Sidra, Barda.

The Kingdom of BARCA, contains Barca, Cairoan, Zadra, Taachara, Bersebena, Bernich, Tolomata, Melela, Carcora, Salina, Bon-André, Patriarche, Docra, Traboch, Mesulomara, Salona, Alberton, Roxa, Rives-Blanches, Raibba.

The BILEDULGERID.

This Country, which contains very near the antient Numidia, is call'd *Biledulgerid* by the *Arabs*, because of the great Number of Dates it produces.

If the Defart of Barca be included in it, it extends from the 5 Degree of Longitude to the 60, and from the 22 of Latitude to the 32, so that its greatest Extent is about 1000 Leagues; and its Breadth which is very irregular, is from 30 to 160 in some Places.

It confines Eastward with *Egypt*, Northward with *Barbary*; Westward with the Ocean, and Southward with the *Zaara*, or Defart.

The Climate is very hot, and notwithstanding very wholesome. The Soil is sandy, uncultivated, and very little inhabited in several Places: In other Places it produces Barley and Anis-feed, and a little Wheat; but its Fertility consists in the great Quantity of Dates it produces, and in its Camels.

Among the Rivers which run through it, the most remarkable are the great River, that of *Salina*, the *Quadilbarbar*, the *Tegorarin*, *Gbiz*, *Ziz*, and others, which all spring from some Lake or Fountain.

It is divided into eight principal Provinces, reckoning the Defart of Barca, which make the most Eastern Part thereof. The seven others are situated in the following Order, going from East to West: First, that of the *Biledulgerid*, which has given its Name to the whole Country: Afterwards those of *Techort*, *Zeb*, *Tegorarin*, *Segelmesse*, *Darba*, and *Tesset*; in which is included the Province of *Sus*, which is towards the South by West.

No capital City can be assigned to it, but each Province has its particular Name, as we'll see in the particular Description of it.

Note, That this Country is inhabited by the Natives, and the *Arabs*: The first are brutish, lascivious, and very great Thieves; the others have more Humanity, but in general all these People are violent, and it is dangerous falling into their Hands.

Note also, That it is in part governed by some petty Kings or Lords, who are most of them tributary of the *Turks* of *Algier*, of *Tunis*, or of *Tripoli*; in part by some Republicks; and in some Places those People live without Laws or Policy, as some Bands of *Arabs* who live in the Defarts, and put several Cities under Contribution.

Note again, That all those Princes and the People are *Mahometans*. The rest follow the *Jewish* Religion, and have their Synagogues in most of the greatest Cities, where they are all Merchants.

A more particular Description of *Biledulgerid*, is as follows:

The Defart of BARCA, contains *Ammon*, *Eleocath*, *Elquechet*, *Augela*, *Gorbam*.

The BILEDULGERID, contains *Teusara*, *Tuzer*, *Gademmes*, *Fezzen*, *Teorregu*.

The Province of TECHORT, contains *Techort*, *Seluba*, *Necau*, the Defart of *Guergela*.

The Province of ZEB, contains *Teolocha*, *Nefta*, *Pescara*, *Borgiu*.

The Province of MEZZAN, contains *Mezzab* only.

The Province of TEGORARIN, contains *Tegorarin*, *Tesebit*, *Tuat*, *Benigori*.

The Province of SEGELMESSE, contains *Segelmesse*, *Chusaira*, *Feghiga*, *Tebelbetta*, *Tamaracroft*.

The Province of TAFILLET, contains *Tafilet* only.

The Province of DARHA, contains *Darba*, *Tamague-rut*, *Benisabib*.

The Province of TISSET, contains *Tisset*, *Ifrena*, *Archa*, *Guaden*.

The Province of SUS, contains *Tarquez*, *Nun*.

The ZAARA, or DESART.

This Country is call'd *Zaara* by the *Arabs*, i. e. *Desart*, because so little inhabited. It made once Part of the antient *Lybia*, and of the Country of the *Gatuli* and *Garamantes*.

It is situated under the Tropick of Cancer, between the 12 and 27 Degree of Latitude, and extends from the 4 of Longitude to the 56; so that it may have more than 950 Leagues in Length, and 40, 60, 100, even as far as 250 in Breadth, according to the different Places.

It confines Northward with the *Biledulgerid*, Eastward with *Nubia*, Southward with *Nigritia*, and Westward with the Ocean.

It is still less cultivated, and less inhabited, than the *Biledulgerid*; notwithstanding which, it enjoys a very wholesome Climate, tho' very hot. All its Riches consist in Camels; and one may travel a hundred Leagues in it, without finding a Drop of Water: Wells are made on the Roads, but they are so few, that very often People dye of Thirst.

There are but three considerable Rivers found in it, viz. that of *Nubia*, which after it has pass'd in the Defarts of *Lempta*, and *Borno*, hides itself under Ground, for the Space of seven or eight Leagues, then appears anew in *Nubia*; that of *Gbir*, which passes in the Defart of *Zuenziga*; and that of the *Horses*, which springs, and continues its whole Course in the Defarts of *Zuenbaga*, where it throws itself into the Ocean, after it has divided itself into two Arms: In the Defart of *Borno* is found the Lake of the same Name, and several others lesser.

This Country is divided into seven principal Provinces or Defarts, which bear the Name of some of their most considerable Cities. Eastward are found *Borno*, *Garga*, and *Berdoa*, which had antiently the Title of Kingdoms. *Lempta*, *Targa*, *Zuenziga*, and *Zanbaga*, are found in this Order, going from East to West: They are all subdivided into other Defarts, which have each their particular Name.

These Provinces or Defarts have each their capital City, from which they borrow their Name.

Note, That the Inhabitants are brutish, wild, and great Thieves. Part of them live in Cities with a little more Humanity; but the others are Vagabonds in Fields, where they keep their Flocks or seek Fortune, and those have neither Laws nor Policy.

Note also, That they have Kings, or particular Lords, whom they call *Zeques*. Some live Libertines in Independency, particularly the *Arabs*.

Note again, That several follow the Doctrine of *Mahomet*; the others have neither Faith nor Religion.

NIGRITIA.

This Part of *Africa*, call'd *Nigritia*, has borrow'd its Name according to some from the River *Niger*, which runs through it; and according to others, this River receives its Name from the Country, and that of the Country comes from the Colour or Hue of its Inhabitants.

It extends between the 8 and 23 Degree of Latitude, from the 3 Deg. of Longitude to the 44; and may have 800 Leagues in Length, near 300 in its greatest Breadth, and 140 in its lesser.

It confines Northward and Eastward with the *Zaara*; Southward with *Guinea*; and Westward with the *Atlantic Ocean*.

The Climate is very hot, but so wholesome, that of itself it cures Maladies. The Soil produces Rice, Flax, and Cotton. It has Mines of Gold, and Copper; Ambergrease, and some Fruit-Trees. The Natives are so lazy, and so ignorant, that they do not know how to make any Use of all those Advantages, preferring Copper to Gold, &c. The Soil in this Country is more fertile than in any other Part of *Africa*; a great Part of it is very little inhabited, because of its excessive Heat, and its Scarcity of Water; for besides the River *Niger*, which traverses it from East to West, and wa-
ters

ters it for the Space of more than 800 Leagues; there are no considerable ones, except Westward, where that River divides itself into five or six Branches, which all have different Names, as *Senega*, *Gambia*, *Rio San Domingo*, and *Rio Grande*.

This Country is divided into sixteen principal Kingdoms, found along the *Niger*, re-ascending towards its Source in the following Order. First, Northward of this River, *Geneboa*, and *Galate*, which are on the Ocean; then *Tanbut*, *Agades*, *Cano*, *Casseua*, and *Gangara*, in which the *Niger* forms an Island, 100 Leagues long, and 50 broad. Between the Rivers *Senega* and *Gambia*, are inclosed the Kingdoms of the same Name, the People whereof are called *Jaloffi*; between *Gambia* and *Rio San Domingo*, are the Kingdoms of the *Cassangas*; between *San Domingo* and *Rio Grande*, those of the *Bijagos*; Southward of the great River, are found following one another, the Kingdoms of the *Biaffari*, *Melli*, *Soufos*, *Mandiga*, *Guber*, *Gago*, *Zegazeg*, and *Zanfara*, which ends at the Lake *Borno*. Most of these Kingdoms are subdivided into several others lesser, which have all their Capital Cities of the same Name; that of *Tanbut* being more considerable and larger, than those of *Mandigues* and *Cano*.

Note, That the Negroes are less wild than the People of *Barbary*, and of the *Biledulgerid*; but they are not less brutish in their Amours. They are ignorant, and very lazy, admiring a Man who has the least Knowledge, and cherishing Foreigners. Most of them carry on the Commerce of Slaves, whom they take from their Neighbours. Men are even seen there that sell their Wives, Children, Fathers, and Mothers to the Europeans.

Note also, That all the Kings of this Country are very absolute in their respective Dominions; notwithstanding which most of them are Tributaries of that of *Tombut*, who is the most powerful of them all.

Note again, That they are all *Mahometans*, or Idolaters, and great Enemies of the *Jews*. Those of the *Defarts* live without Religion. There are a few *Christians* among them, but much corrupted.

Here follows a more particular Description of all those vast Territories.

The ZAARA, or DESART.

The Kingdom of BORNO, contains *Borno*, *Kaugh*, *Amasen*.

The Kingdom of GOAGA.

The Kingdom of BERDOA.

The Desart of LEMPTA, contains *Lempta*, *Digir*, *Agades*.

The Desart of TARGA, contains *Terga*, *Zaghara*, *Hair*.

The Desart of ZUENZIGA, contains *Zuenziga*, *Ziz*, *Ghir*.

The Desart of ZANHAGA, contains *Zanbaga*, *Tegassa*, *Alhamara*.

NIGRITIA.

The Kingdom of GENEBOA, contains *Geneboa*, *Patessau*, *Sambalamech*, *Brack*, *Joudejabe*.

The Kingdom of GUALATA, contains *Gandia*, *Fulli*, *Hoden*, *Hebedesex*.

The Kingdom of JALAFI, contains *Senega*, *Budomel*, *Solul*, *Vlil*, *Gambee*.

The Kingdom of CASANGAS, contains *Casamansa*, *Jarem*.

The Kingdom of the BIJAGOS, contains *Catcheo*.

The Kingdom of TANBUT, contains *Tanbut*, *Salla*, *Berissa*, *Gocgneve*, *Caragoli*, *Cassali*.

The Kingdom of AGADES, contains *Agades*, *Degbir*, *Mura*, *Mayme*, *Cutumbo*.

The Kingdom of CANO, contains *Cano*, *Germa*, *Tassava*.

The Kingdom of CASSENA, contains *Cassena*, *Tirca*, *Nebrina*.

The Kingdom of GANGARA, contains *Gangara*, *Marrasa*, *Semegda*.

The Kingdom of the BIAFARI, contains *Guinjala*, *Bigula*.

The Kingdom of MELLI, contains *Melli*, *Beria*.

The Kingdom of the SOUSOS, contains *Bena*.

The Kingdom of MANDINGA, contains *Mandinga*, *Tocrur*, *Cantory*.

The Kingdom of GAGO, contains *Gago*, *Dau*, *Tanby*.

The Kingdom of GUBER, contains *Guber*, *Malet*.

The Kingdom of ZEGZEG, contains *Zegzeg*, *Chanana*.

The Kingdom of ZANFARA, contains *Zanfara*, *Reghebil*.

GUINEA.

This Country has always made Part of that of the Negroes. It is not half so large as the other Part I have called *Nigritia*; but it is in Proportion much better inhabited, because it has more Coasts.

The French discover'd it about the Year 1346, and settled in some Places of it; but during the Civil Wars under the Reigns of *Charles VI.* and *Charles VII.* they deserted it; and the Portuguese, English, Dutch, Swedes, and Danes, have settled there since, and built Forts.

It extends between the 4 and 12 Deg. of Latitude, from the 9 of Longitude to the 38; so that it may have 550 Leagues in Length, 140 in its greatest Breadth, and about 60 in its lesser, at the Mouth of the River *Benin*.

It confines Eastward with the Kingdom of *Biafara*; Northward with *Nigritia*; Westward with *Sierra Leona*; and Southward with the Sea of the same Name.

Its Situation lets us know that the Climate is excessively hot. The Land is low, fat, and very fertile, watered by several small Brooks, and the frequent Rains which render the Air so bad, that few Strangers travel in it, without falling sick. The Soil produces Pepper, Sugar-Canes, Cotton, Rice, Millet, Barley, and several other Sorts of Corn, and Fruit. It has several golden Mines, and feeds a vast Number of Elephants, Peacocks, Monkeys, Tygers, Leopards, &c. and the Inhabitants carry on a great Commerce of Ivory. A great Quantity of excellent Fish is taken on the Coasts, among which are the *Dorade*, the *Bonite*, &c.

The most remarkable of its Rivers are the *Sweira da Costa*, those of *Da volta*, *Lago*, *Calabri*, *Del Rey*, *Benin*, and *Dos Camarones*, which parts it from *Biafara*.

GUINEA is divided into three principal Parts, which are the the particular Kingdom of *Guinea*, situated in the Middle; Eastward of this the Kingdom of *Benin*; and the Province of *Malaguetta*, or *Maniguete*, Westward. These Kingdoms, and this Province, is again subdivided into several others very considerable, as *Sabou*, *Fatu*, *Accaria*, *Arda*, &c. but as we have very little Knowledge of them, I'll content myself with saying that the particular Coast of *Guinea* is distinguished by three different Names. The most extended and most eastern, is called the *Golden Coast*, because of the Quantity of Gold carried away from thence: The most western is called the *Ivory Coast*, for the same Reason; and this is again subdivided into two Parts, the most eastern whereof is called the Coasts of *Good People*; and the most western the Coast of *Bad People*.

Note, That the People of *Guinea* are witty, dextrous, and understand Commerce very well. They are proud, and Thieves to Excess. Tho' they be of a strong Constitution, they are lazy, and Cowards. They have their Skin black, go commonly quite naked, without any Shame, and carry a naked Knife in their Hand, to be always ready to take Revenge of their Enemies. They often eat their Meat quite raw; and even Animals, and Fowls with their Guts. The Women are extremely inclin'd to Lubricity, and love Foreigners.

Note also, That *Guinea* is govern'd by several Kings, among whom that called Emperor of *Guinea* is most powerful, having several other Kings and Princes for tributary, and subject. That of *Benin* is likewise very powerful, having several Kingdoms in his Dominions. The Province of *Malaguetta* is possessed by a great Number of Princes and People towards the Mountains. Some

Some place it in the Kingdom of *Sierra Leona*: The *French, English, Dutch, Portuguese, &c.* have each their Factories on the Coasts of *Guinea*.

Note again, That the People are still Idolaters; there are found a few *Christians* among them, and we learn from certain Relations, that some of their Kings are Catholic.

A more particular Description of *Guinea*, is as follows:

The Kingdom of *GUINEA*, contains *St. George de las Minas, Moure, Tabcorara, Feta, Semsce, Camani, Sabou, Mambereby, S. Laurenço, Catamanu, Acanes-Grandes, Acanes Pequenos, Dauma, Aceara, Labada, Caures, Axem, Affina, Buma, Alderrada, Jamo, Xabanda, Wetoe, Tabo.*

The Kingdom of *BENIN*, contains *Benin, Arobon, A-verre, Labo, Curamo, Ody, Daroera, Joyo, Jackeyn, Foulaen, Popou, Calabari, Boni, Bodi.*

The Province of *MALAGUETTE*, contains *Timaa, Bugos, Bagga, Quinamora, Massati, Faly, Hamaya, Swyme, Fettere, Grawaly.*

ETHIOPIA.

All the rest of the Continent of *Africa*, is commonly known under the Name of *Ethiopia*, which is divided into *inward* and *outward*.

The *inward Ethiopia*, contains *Abyssinia*, or the Empire of the *Abyssinians*, and *Nubia*, Northward of it.

The *outward, or exterior Ethiopia*, contains the Kingdoms of *Biafara*, and of *Congo*; the Coasts or Country of the *Cafres*; the Empire of *Monomotapa*, and of *Monoemugi*; the Coasts of *Zanguebar, Ajan*, and *Abex*, which are properly of *Abyssinia*, tho' they be at present in the Power of the *Turks*.

ABYSSINIA.

This Empire, which the *Arabs* call *El-Abassi*, or *Abassi*, is the State of the *Grand Negus*, known among us under the Name of *Prester John*.

It extends from the 48 Deg. of Longitude, to about the 74; and from the 20 Deg. of northern Latitude, to the 14 of southern Latitude; so that it may have very near 700 Leagues in its greatest Extent from North to South, and about 500 from East to West.

It confines Northward with *Nubia*; Westward with the Coasts of *Abex, Ajan*, and *Zanguebar*; Southward with the Empire of *Monoemugi*; and Westward with the People subject of *Congo*, and of *Biafara*, and the *Gales*, who are very powerful.

The Climate is very temperate, with Regard to its Situation, particularly on the Mountains, and in the flat Country, but in the Valleys it is excessively hot. The Soil is various; for in some Places are found great Rocks, with deep Caves, where grows nothing good to eat; but in the Plains, and the Neighbourhood, it is very fertile in Barley, Millet, Maiz, and several other Sorts of Corn unknown to us, as the *Teset*, or *Taso*, *Agousta*, and *Machella*, of which they make Bread and Beer. It produces all Sorts of Gums, Ginger, Sugar, Honey, and Wax, which serves to make Candles, Cotton, and Linc. Mines of Gold, Silver, Tin, Copper, Iron, and Sulphur are found in that Empire almost every where. There are seen in it several Species of ferocious Animals, wild, and domestick, as Elephants, Tygers, Lions, Panthers, Rhinoceros, Giraffi, Monkeys, Wild-Boars, Harts, Deers, Hares, Civets, Goats, wild Oxen, Camels, Horses, Asses, Cows, and Sheep; in a Word, all Sorts of Game and Fowls we have in *Europe*, and several others unknown to us. There are also found in the Rivers, Crocodiles, *Hippopotams*, or wild Horses.

The most considerable Rivers which water this vast Country are, the *Nile*, to which the Learned give two Sources in the Mountains of the Moon; the first, and most certain, is the most western, from which that River flowing, passes through the Lake *Zair*, from whence continuing its Course for the Space of more than 400 Leagues, it comes to form the Island *Meroe*, at present *Guagere*, 90 Leagues long, and 50 broad. Then it enters *Nubia*, and from thence *Egypt*; the other

Source flowing from the same Mountains, comes to pass in the Lake *Zassan*; then continuing its Course for the Space of about 170 Leagues towards the North by West, comes to disembogue into the first Current, under the second Degree of Latitude. The Rivers *Abanbi*, and *Tacassi*, the first whereof passes at *Angote*, and comes to disembogue into the great River, below the Island *Guagere*; those of *Marabo* and *Cocor*, whose Course is from East to West, resort also thither in the most eastern Arm of the two, which form the Island. There is also seen Westward the River *Niger*, with its Lake, and its Source. The Lake *Zaire* has more than 150 Leagues in Length from South to North, about 80 in Breadth, and more than 350 of Circuit. The Lake *Zassan* has 140 Leagues in Length from South to Northward, 60 in its greatest Breadth, and more than 300 of Circuit, without reckoning the Lake *Fungi*, which seems to make Part of it. There are in this Lake several Isles of 30, 40, and 50 Leagues round. The Lake *Niger* may have 70 Leagues in Length from South to North, 30 in its greatest Breadth, and about 160 of Circuit.

To give some Order to the different Kingdoms or Provinces of *Abyssinia*, I'll say, that in the modern Maps are found, between *Nubia* and the *Red Sea*, the *Bargomasse*, i. e. the Kingdom of the Sea, and *Tigremabon*, whose Coasts are call'd the Coasts of *Abex*. *Sabaim*, the Country of the Queen of *Sheba*, who came to visit *Solomon*; *Angote*, *Xoa*, *Fatigara*, *Gora*, *Gamo*, *Dobas*, and *Dangeli*, are between the River *Abanbi*, and the Kingdom of the exterior *Ethiopia*, adjacent to the Coast of *Ajan*. Between that same River, the Coast of *Zanguebar* and the *Nile*, are found *Bagamedri*; along the streight Shore of the River, *Sora*, *Belleguanze*, *Armara*, *Ambiam*, *Goyam*, *Agag*, *Cafates*, *Fungi*, *Nova*, *Quara*, *Zet*, *Gani*, *Guzabella*, *Tirut*, *Gorga*, and *Gemen*. Westward of the *Nile* are found *Ximenche*, *Ambiancaniwa*, *Dambea*, *Vangue*, *Zamut*, and *Malemba*, which is Westward of the Lake *Zair*: These Kingdoms are again subdivided into several Provinces.

Note, That these People are ingenious enough, and disciplinable, so that they learn easily what they are taught. They read often the Scripture, and have a great Respect for the Sacraments, and their Church, which they never enter but barefoot; they are charitable to Foreigners, and of good Humour, but lazy and very careless; they are Black, but some more than others, according as they are nearer the Line; their Cloaths are commonly of Silk, or Cotton, according to their Rank or Quality, some of them having no other Cloathing but the Skins of Animals; they eat their Meat half done, and sometimes raw: All the Priests and Monks carry a Cross in their Hands when they go abroad; among these Priests some are married, but never but once.

Note also, That *Abyssinia* is governed by a Prince call'd *Articlabassi* by the *Arabs*, and *Negus* by the *Abyssinians*; we call him *Prester John*, though improperly. That Emperor pretends to be descended from the Race of *David*; he has no fix'd Habitation, but stops sometimes in one Place, sometimes in another, causing always 6000 Tents to be carried along with him, as well for himself, as for all his Retinue. In the Fortrefs of *Amara* there is an Academy, where his Children are educated, till the Prince dying, a Successor is given him from amongst them: The Kings or Lords I have mentioned, are all subject or tributary to him; and in the Provinces which belong to him in proper, he keeps Vice-roys or Governors. *Marmol* says, that the Island *Guagere*, or *Meroe*, is in the Power of three Kings, who are always at War; one is *Mahometan*, one *Idolater*, and the other *Christian*, and subject to *Prester John*: The greatest Part of the Coast of *Abex* are in the Power of the Grand Seignior.

Note again, That the *Abyssinians* pretend to be descended from the first Christians, and to have been first instructed in the *Jewish* Religion by the Queen of *Sheba*, who went to visit King *Solomon*, by whom, they

they say, she had a Son called *Melilech*, who governed them after his Mother's Death, and that they received the Light of the Gospel by means of *Queen Candace*, whose Eunuch was baptized by *St. Philip*, and afterwards by *St. Thomas*, *St. Matthew*, and *St. Bartholomew*. Ever since that Time they have preserved the Name of *Christians*, but they have been corrupted by the Errors of *Eutyches* and *Dioscorus*: They have a Patriarch whom they call *Abuna*, inferior to that of the *Cophti*, who resides at *Alexandria* in *Egypt*, by whom he must be confirmed. They circumcise their Children, afterwards baptize them, viz. the Males forty Days after their Birth, and the Females sixty; which is always done on *Saturday* and *Sunday*, because they say Mass on those Days: After Mass the Priest gives the Sacrament to those Children, and immediately after the Mother gives them the Breast to help them to swallow it. The *Grand Negus*, and several Princes had been converted to the Faith of the *Roman Church* by the *Jesuits*, from among whom the Patriarch was chosen; but some Time afterwards they renounced that Faith, and followed their antient Errors.

Here follows a more particular Description of *Abyssinia*:

The Kingdom of *TIGREE*, contains *Chaxumo*, *Agro*, *Arugna*, *Corcora*, *Sabain*, Kingdom. *Bacineta*.

The Kingdom of *BARNAGAS*, contains *Barva*, *Zama*, *Lama*, *Emacen*.

The Kingdom of *ANGOTE*, contains *Angote*, *Imbra*, *Cenistos*, *Barmaria*, *Bugwana*, *S. Croce*, *Fugabella*, *Olabi*.

The Kingdom of *FATIGARA*, contains *Nundiné*, *Dobos*.

The Kingdom of *XOA*.

The Kingdom of *BAGAMEDRI*, contains *Ambadara*, *Therua*, *Sova*, *Baza*, *Ermita*, *Azuga*, *Machada*.

The Kingdom of *AMARA*, contains *Amara*, *Azzel*, *Fungi*, *Barcena*, *Beleguanze*, *Agola*, *Cofla*, *Dara*, *Gemen*, *Zafsen*, *Gorga*, *Bara*, *Orgabra*, *Lofa*, *Ogue*, *Azuga*.

The Kingdom of *NARCA*, contains *Gavi*, *Retb*, *Gazabela*, *Tirut*, *Falacia*, *Gafat*, *Hiero*.

The Kingdom of *MALEMBIA*, contains *Zair*, *Meti*, *Dangar*, *Debsan*.

The Kingdom of *GOVAM*, contains *Agag*, *Marauma*, *Quara*, *Cafates*, *Fiengo*, *Nova*, *Gorava*, *Gearva*, *Ambiam*, *Sesila*, *Girat*.

The Kingdom of *DAMUT*, contains *Damut*, *Harode*, *Legula*, *Catla*, *Gaga*.

The Kingdom of *BAMBEA*, contains *Dambea*, *Chedafian*, *Vangue*, *Maitagazi*, *Ambiancantiva*, *Cemenia*, *Ambiani*.

The Kingdom of *XIMENCHE*, contains *Amasen*, *Syre*.

The Island of *GUEGUERE*, contains *Saraboes*, *Esfre*.

N U B I A.

This Kingdom is called by the Antients the Country of the *Nubi*, *Nubeans*, or *Nobadi*; by some, *Little Egypt*, but most commonly *Nubia*.

It is represented very near like the Sole of the Foot, situated in such a Manner between the 10 and 23 Degree of Latitude, and extending from the 48 of Longitude, to the 65 Deg. 30 Min. that it may have about 370 Leagues in its greatest Extent from South by West to North by East, and 190 in its greatest Breadth.

It confines Northward with the Desert of *Barca*, and *Egypt*; Eastward with the Kingdom of *Barnagas*, and the Island *Guegere*; Southward with the Deserts, which are of the Empire of the *Abyssinians*; and Westward with the Deserts of *Borno* and *Gaoga*.

The Climate is excessive hot every where; but the Soil is not of an equal Temperature. In the Neighbourhood of the *Nile* it is very fertile in all Things, because of the Inundation of that River. It produces a great Quantity of Sugar-Canes, but the Inhabitants have not the Secret of purifying it, but leave the Sugar in its Blackness: It has besides Mines of Gold, Sanders-Wood, Civet, and Abundance of Ivory: Eastward the Land is uncultivated, and Desert.

Note, That the Natives are courageous and cunning; they apply themselves to Commerce and Husbandry:

They are extremely black, and cloath themselves with Cotton Cloth.

Note also, That *Nubia* is governed by a powerful King, since it is related that some of them have brought an Army of 100,000 Horse into the Field, against the Governor of *Egypt*, who persecuted the Christians.

Note again, That some Authors pretend, that the *Nubians* are neither *Christians*, *Jews*, *Mahometans*, nor Idolaters; and say, that having wanted Bishops and Priests, the Religion is almost entirely destroy'd, with their Churches which they have neglected.

NUBIA, contains *Nuabia*, *Sula*, *Jalac*, *Dancala*, *Cusa*, *Zaghaira*, *Sabatra*, *Matban*, *Sanina*, *Bugia*, *Gorham*, *Salout*, *Demba*, *Tormalena*, *Dagra*, *Zamaclea*, *Jadie*, *Zigide*, *Tagua*, *Gualva*.

The Country of BIAFARA.

Between *Negritia* and *Congo*, are found several Kingdoms, which some place between the Countries of the Negroes, like *Guinea*; but which others put, with more Reason, between the Countries of the exterior *Aethiopia*. The Principals of these Kingdoms are *Biafara*, *Gabon*, *Pongo*, *Macoco*, *Giringromba*, *Medla*, and *Mujac*: The three first are Westward, the three following Eastward, and the last in the Middle: I'll not distinguish them, because I believe they don't differ from one another, and we know very little of them.

The Country which contains these Kingdoms in general, is situated between the 34 and 48 Degree of Longitude, and extends from the 13 Degree of Northern Latitude, to the 2 of the Southern: So that it takes up near 300 Leagues in its greatest Extent, from North to South, and 280 from East to West.

It confines Eastward with the River and Lake *Niger*, and some Mountains which part it from *Abyssinia*, and the *Glaqui*, People of *Congo*; Northward with the Kingdoms of *Congo*, and *Zanfara*; Westward with that of *Benin*, and the Ocean; and Southward with the Territories of *Congo*.

The Climate is extremely hot at all Times: Winter is not distinguished but by long and violent Rains, which fall from the Month of *April* to that of *August*; their Summer begins in *September*, and it is pretended that the Heat is not so violent then as in Winter.

Note, That each of these Kingdoms has its capital City of the same Name, where most commonly the King resides.

Note also, That the Inhabitants are wild, Cheats, and Thieves: They are guilty of the most infamous Actions, laying together without Distinction, the Father and the Daughter, the Mother and the Son, Brothers and Sisters, all Things being in common among them; and it is said that the Women think themselves much honoured to lay with an *European*. They paint their Bodies with various Colours, and adorn it with small Toys, as Rings, little Shells, &c. The Kings rub their Faces and Hands with Chalk to appear more beautiful.

Note again, That they are all Idolaters, adore the Devil, Sun, Moon, the Trees, and the Earth, for which they have so great a Respect, that they will not permit one should spit upon it, because it produces the Things necessary for their Subsistence.

The Countries of CONGO.

I speak here in general of the Kingdoms of *Congo*, though I know perfectly well that they are divided between several Kings, Lords, and People: But as they have all very near the same Qualities, and their Government is very near the same, I have put them together for Brevity sake.

The Country I speak of here, is situated on the Western Coast of *Aethiopia*, between the 35 and 49 Degree of Longitude, extending from the 2 of Northern Latitude to 14, 30 Min. of the Southern, so that it has very near 300 Leagues in its greatest Extent from North to South, and 260 in Breadth.

Some place it in the Kingdom of *Sierra Leona*: The *French, English, Dutch, Portuguese, &c.* have each their Factories on the Coasts of *Guinea*.

Note again, That the People are still Idolaters; there are found a few *Christians* among them, and we learn from certain Relations, that some of their Kings are Catholic.

A more particular Description of *Guinea*, is as follows:

The Kingdom of *GUINEA*, contains *St. George de las Minas, Moure, Tabcorara, Feta, Semsee, Camani, Sabou, Mambereby, S. Laurenço, Catamanu, Acanes-Grandes, Acanes Pequenos, Dauma, Aceara, Labada, Caures, Axem, Affina, Buma, Alderrada, Jamo, Xabanda, Wetoe, Tabo.*

The Kingdom of *BENIN*, contains *Benin, Arobon, A-verre, Labo, Curamo, Ody, Daroera, Jovo, Jackeyn, Foulaen, Popou, Calabari, Boni, Bodi.*

The Province of *MALAGUETTE*, contains *Timaa, Bugos, Bagga, Quinamora, Massati, Faly, Hamaya, Swyme, Fettere, Grawaly.*

ETHIOPIA.

All the rest of the Continent of *Africa*, is commonly known under the Name of *Ethiopia*, which is divided into *inward* and *outward*.

The *inward Ethiopia*, contains *Abyssinia*, or the Empire of the *Abyssinians*, and *Nubia*, Northward of it.

The *outward, or exterior Ethiopia*, contains the Kingdoms of *Biafara*, and of *Congo*; the Coasts or Country of the *Cafres*; the Empire of *Monomotapa*, and of *Monoemogi*; the Coasts of *Zanguebar, Ajan*, and *Abex*, which are properly of *Abyssinia*, tho' they be at present in the Power of the *Turks*.

ABYSSINIA.

This Empire, which the *Arabs* call *El-Abassi*, or *Abassi*, is the State of the *Grand Negus*, known among us under the Name of *Prefter John*.

It extends from the 48 Deg. of Longitude, to about the 74; and from the 20 Deg. of northern Latitude, to the 14 of southern Latitude; so that it may have very near 700 Leagues in its greatest Extent from North to South, and about 500 from East to West.

It confines Northward with *Nubia*; Westward with the Coasts of *Abex, Ajan*, and *Zanguebar*; Southward with the Empire of *Monoemugi*; and Westward with the People subject of *Congo*, and of *Biafara*, and the *Gales*, who are very powerful.

The Climate is very temperate, with Regard to its Situation, particularly on the Mountains, and in the flat Country, but in the Valleys it is excessively hot. The Soil is various; for in some Places are found great Rocks, with deep Caves, where grows nothing good to eat; but in the Plains, and the Neighbourhood, it is very fertile in Barley, Millet, Maiz, and several other Sorts of Corn unknown to us, as the *Teset*, or *Taso*, *Agousta*, and *Mackella*, of which they make Bread and Beer. It produces all Sorts of Gums, Ginger, Sugar, Honey, and Wax, which serves to make Candles, Cotton, and Linc. Mines of Gold, Silver, Tin, Copper, Iron, and Sulphur are found in that Empire almost every where. There are seen in it several Species of ferocious Animals, wild, and domestick, as Elephants, Tygers, Lions, Panthers, Rhinoceros, Giraffi, Monkeyes, Wild-Boars, Harts, Deers, Hares, Civets, Goats, wild Oxen, Camels, Horses, Asses, Cows, and Sheep; in a Word, all Sorts of Game and Fowls we have in *Europe*, and several others unknown to us. There are also found in the Rivers, Crocodiles, *Hippopotams*, or wild Horses.

The most considerable Rivers which water this vast Country are, the *Nile*, to which the Learned give two Sources in the Mountains of the Moon; the first, and most certain, is the most western, from which that River flowing, passes through the Lake *Zair*, from whence continuing its Course for the Space of more than 400 Leagues, it comes to form the Island *Meroe*, at present *Gugere*, 90 Leagues long, and 50 broad. Then it enters *Nubia*, and from thence *Egypt*; the other

Source flowing from the same Mountains, comes to pass in the Lake *Zaflan*; then continuing its Course for the Space of about 170 Leagues towards the North by West, comes to disembogue into the first Current, under the second Degree of Latitude. The Rivers *Abanki*, and *Tacassi*, the first whereof passes at *Angote*, and comes to disembogue into the great River, below the Island *Gugere*; those of *Marabo* and *Cocor*, whose Course is from East to West, resort also thither in the most eastern Arm of the two, which form the Island. There is also seen Westward the River *Niger*, with its Lake, and its Source. The Lake *Zaire* has more than 150 Leagues in Length from South to North, about 80 in Breadth, and more than 350 of Circuit. The Lake *Zaflan* has 140 Leagues in Length from South to Northward, 60 in its greatest Breadth, and more than 300 of Circuit, without reckoning the Lake *Fungi*, which seems to make Part of it. There are in this Lake several Isles of 30, 40, and 50 Leagues round. The Lake *Niger* may have 70 Leagues in Length from South to North, 30 in its greatest Breadth, and about 160 of Circuit.

To give some Order to the different Kingdoms or Provinces of *Abyssinia*, I'll say, that in the modern Maps are found, between *Nubia* and the *Red Sea*, the *Bargamasse*, i. e. the Kingdom of the Sea, and *Tigremabon*, whose Coasts are call'd the Coasts of *Abex*. *Sabaim*, the Country of the Queen of *Sheba*, who came to visit *Solomon*; *Angote*, *Xoa*, *Fatigara*, *Gora*, *Gamo*, *Dobas*, and *Dangali*, are between the River *Abanki*, and the Kingdom of the exterior *Ethiopia*, adjacent to the Coast of *Ajan*. Between that same River, the Coast of *Zanguebar* and the *Nile*, are found *Bagamedri*; along the streight Shore of the River, *Sora*, *Belleguanze*, *Armara*, *Ambiam*, *Goyam*, *Agag*, *Cafates*, *Fungi*, *Nova*, *Quara*, *Zet*, *Gani*, *Guzabella*, *Tirut*, *Gorga*, and *Geimen*. Westward of the *Nile* are found *Ximenche*, *Ambiancantiva*, *Dambee*, *Vangue*, *Zamut*, and *Malemba*, which is Westward of the Lake *Zair*: These Kingdoms are again subdivided into several Provinces.

Note, That these People are ingenious enough, and disciplinable, so that they learn easily what they are taught. They read often the Scripture, and have a great Respect for the Sacraments, and their Church, which they never enter but barefoot; they are charitable to Foreigners, and of good Humour, but lazy and very careless; they are Black, but some more than others, according as they are nearer the Line; their Cloaths are commonly of Silk, or Cotton, according to their Rank or Quality, some of them having no other Cloathing but the Skins of Animals; they eat their Meat half done, and sometimes raw: All the Priests and Monks carry a Cross in their Hands when they go abroad; among these Priests some are married, but never but once.

Note also, That *Abyssinia* is governed by a Prince call'd *Articlabassi* by the *Arabs*, and *Negus* by the *Abyssinians*; we call him *Prefter John*, though improperly. That Emperor pretends to be descended from the Race of *David*; he has no fix'd Habitation, but stops sometimes in one Place, sometimes in another, causing always 6000 Tents to be carried along with him, as well for himself, as for all his Retinue. In the Fortrefs of *Amara* there is an Academy, where his Children are educated, till the Prince dying, a Successor is given him from amongst them: The Kings or Lords I have mentioned, are all subject or tributary to him; and in the Provinces which belong to him in proper, he keeps Vice-roys or Governors. *Marmol* says, that the Island *Gugere*, or *Meroe*, is in the Power of three Kings, who are always at War; one is *Mahometan*, one *Idolater*, and the other *Christian*, and subject to *Prefter John*: The greatest Part of the Coast of *Abex* are in the Power of the Grand Seigneur.

Note again, That the *Abyssinians* pretend to be descended from the first Christians, and to have been first instructed in the *Jewish* Religion by the Queen of *Sheba*, who went to visit King *Solomon*, by whom they

they say, she had a Son called *Melilech*, who governed them after his Mother's Death, and that they received the Light of the Gospel by means of *Queen Candace*, whose Eunuch was baptized by *St. Philip*, and afterwards by *St. Thomas*, *St. Matthew*, and *St. Bartholomew*. Ever since that Time they have preserved the Name of *Christians*, but they have been corrupted by the Errors of *Eutyches* and *Dioscorus*: They have a Patriarch whom they call *Abuna*, inferior to that of the *Cophti*, who resides at *Alexandria* in *Egypt*, by whom he must be confirmed. They circumcise their Children, afterwards baptize them, viz. the Males forty Days after their Birth, and the Females sixty; which is always done on *Saturday* and *Sunday*, because they say Mass on those Days: After Mass the Priest gives the Sacrament to those Children, and immediately after the Mother gives them the Breast to help them to swallow it. The *Grand Negus*, and several Princes had been converted to the Faith of the *Roman Church* by the *Jesuits*, from among whom the Patriarch was chosen; but some Time afterwards they renounced that Faith, and followed their antient Errors.

Here follows a more particular Description of *Abyssinia*:

The Kingdom of *TIGREE*, contains *Chaxumo*, *Agro*, *Arugna*, *Corcora*, *Sabain*, Kingdom. *Bacineta*.

The Kingdom of *BARNAGAS*, contains *Barva*, *Zama*, *Lama*, *Emacen*.

The Kingdom of *ANGOTE*, contains *Angote*, *Imbra*, *Cenistos*, *Barmaria*, *Buguana*, *S. Croce*, *Jugabella*, *Olabi*.

The Kingdom of *FATIGARA*, contains *Nundiné*, *Dobos*.

The Kingdom of *XOA*.

The Kingdom of *BAGAMEDRI*, contains *Ambadara*, *Therva*, *Sova*, *Baza*, *Ermita*, *Azuga*, *Machada*.

The Kingdom of *AMARA*, contains *Amara*, *Azzel*, *Fungi*, *Barcena*, *Beleguanze*, *Agola*, *Cofla*, *Dara*, *Gemen*, *Zafan*, *Gorga*, *Bara*, *Orgabra*, *Lofa*, *Ogue*, *Azuga*.

The Kingdom of *NARCA*, contains *Gavi*, *Reth*, *Gazabela*, *Tirut*, *Falacia*, *Gafat*, *Hiero*.

The Kingdom of *MALEMBE*, contains *Zair*, *Meti*, *Dangar*, *Debsan*.

The Kingdom of *GOYAM*, contains *Agag*, *Marauma*, *Quara*, *Casates*, *Fiengo*, *Nova*, *Gorava*, *Gearva*, *Ambiam*, *Sefila*, *Girat*.

The Kingdom of *DAMUT*, contains *Damut*, *Harode*, *Legula*, *Calta*, *Gaga*.

The Kingdom of *BAMBEA*, contains *Dambea*, *Chedafan*, *Vangue*, *Maitagazi*, *Ambiancantiva*, *Cemenia*, *Ambiani*.

The Kingdom of *XIMENCHE*, contains *Amasen*, *Syre*.

The Island of *GUEGUERE*, contains *Saraboes*, *Efire*.

NUBIA.

This Kingdom is called by the Antients the Country of the *Nubi*, *Nubeans*, or *Nobadi*; by some, *Little Egypt*, but most commonly *Nubia*.

It is represented very near like the Sole of the Foot, situated in such a Manner between the 10 and 23 Degree of Latitude, and extending from the 48 of Longitude, to the 65 Deg. 30 Min. that it may have about 370 Leagues in its greatest Extent from South by West to North by East, and 190 in its greatest Breadth.

It confines Northward with the Desert of *Barca*, and *Egypt*; Eastward with the Kingdom of *Barnagas*, and the Island *Guegere*; Southward with the Deserts, which are of the Empire of the *Abyssinians*; and Westward with the Deserts of *Borno* and *Gaoga*.

The Climate is excessive hot every where; but the Soil is not of an equal Temperature. In the Neighbourhood of the *Nile* it is very fertile in all Things, because of the Inundation of that River. It produces a great Quantity of Sugar-Canes, but the Inhabitants have not the Secret of purifying it, but leave the Sugar in its Blackness: It has besides Mines of Gold, Sanders-Wood, Civet, and Abundance of Ivory: Eastward the Land is uncultivated, and Desert.

Note, That the Natives are courageous and cunning; they apply themselves to Commerce and Husbandry:

They are extremely black, and cloath themselves with Cotton Cloth.

Note also, That *Nubia* is governed by a powerful King, since it is related that some of them have brought an Army of 100,000 Horse into the Field, against the Governor of *Egypt*, who persecuted the Christians.

Note again, That some Authors pretend, that the *Nubians* are neither *Christians*, *Jews*, *Mahometans*, nor Idolaters; and say, that having wanted Bishops and Priests, the Religion is almost entirely destroy'd, with their Churches which they have neglected.

NUBIA, contains *Nuabia*, *Sula*, *Jalac*, *Dancala*, *Cusa*, *Zaghaira*, *Sabatra*, *Mathan*, *Sanina*, *Bugia*, *Gorham*, *Salout*, *Demba*, *Tormalena*, *Dagra*, *Zamacla*, *Jadie*, *Zigide*, *Tagua*, *Gualva*.

The Country of BIAFARA.

Between *Negritia* and *Congo*, are found several Kingdoms, which some place between the Countries of the Negroes, like *Guinea*; but which others put, with more Reason, between the Countries of the exterior *Aethiopia*. The Principals of these Kingdoms are *Biafara*, *Gabon*, *Pongo*, *Macoco*, *Giringromba*, *Medla*, and *Mujac*: The three first are Westward, the three following Eastward, and the last in the Middle: I'll not distinguish them, because I believe they don't differ from one another, and we know very little of them.

The Country which contains these Kingdoms in general, is situated between the 34 and 48 Degree of Longitude, and extends from the 13 Degree of Northern Latitude, to the 2 of the Southern: So that it takes up near 300 Leagues in its greatest Extent, from North to South, and 280 from East to West.

It confines Eastward with the River and Lake *Niger*, and some Mountains which part it from *Abyssinia*, and the *Glaqui*, People of *Congo*; Northward with the Kingdoms of *Congo*, and *Zanfara*; Westward with that of *Benin*, and the Ocean; and Southward with the Territories of *Congo*.

The Climate is extremely hot at all Times: Winter is not distinguished but by long and violent Rains, which fall from the Month of *April* to that of *August*; their Summer begins in *September*, and it is pretended that the Heat is not so violent then as in Winter.

Note, That each of these Kingdoms has its capital City of the same Name, where most commonly the King resides.

Note also, That the Inhabitants are wild, Cheats, and Thieves: They are guilty of the most infamous Actions, laying together without Distinction, the Father and the Daughter, the Mother and the Son, Brothers and Sisters, all Things being in common among them; and it is said that the Women think themselves much honoured to lay with an *European*. They paint their Bodies with various Colours, and adorn it with small Toys, as Rings, little Shells, &c. The Kings rub their Faces and Hands with Chalk to appear more beautiful.

Note again, That they are all Idolaters, adore the Devil, Sun, Moon, the Trees, and the Earth, for which they have so great a Respect, that they will not permit one should spit upon it, because it produces the Things necessary for their Subsistence.

The Countries of CONGO.

I speak here in general of the Kingdoms of *Congo*, though I know perfectly well that they are divided between several Kings, Lords, and People: But as they have all very near the same Qualities, and their Government is very near the same, I have put them together for Brevity sake.

The Country I speak of here, is situated on the Western Coast of *Aethiopia*, between the 35 and 49 Degree of Longitude, extending from the 2 of Northern Latitude to 14, 30 Min. of the Southern, so that it has very near 300 Leagues in its greatest Extent from North to South, and 260 in Breadth.

It confines Northward with the Kingdoms of *Gabon* and *Macoco*, whose King is called by some, Prince or King of the *Anzicans*, Eastward with the Kingdom of *Danut*, and the Lake *Zair*; Southward with the Kingdoms of *Malemba* and *Mataman*, and Westward with the Ocean, called the Sea of *Congo*.

The Climate is excessive hot, when it is fair Weather, but often tempered by the North by West Winds, and the great Rains which fall commonly in the Afternoon, during the Months of *April*, *May*, *June*, *August*, and make their Winter; but in the Forenoon it is as hot as in the Summer: It is thought that those Rains cause the Inundations of the *Nile*, of the *Niger*, of the *Zair*, and of other Rivers which water the Soil, and render it fertile in all Things necessary for Life. It produces Abundance of Rice, Maize, white Millet, and another small Sort of Corn, call'd *Luco* by the Inhabitants, and of which they make very good Bread: There are seen in it Fruit-Trees of several Species, as Orange-Trees, Lemon-Trees, and Palm-Trees of three Sorts. It feeds Oxen, Cows, Hogs, Goats, and Sheep, which bear three or four Times a Year; and also Elephants, Tygers, Monkeys, Civets, and other Animals unknown to us, as the *Zebra*, which resembles a Mule; the *Daut*, and the *Empalariga*, which have almost the Figure of a Heifer. Pelicans, Peacocks, Pheasants, Partridges, and several other Species of Volatiles: There are found in it large Serpents, and very venomous Vipers. It has Mines of Silver, Copper, and Crystal; but Iron is very rare, and much valued.

Besides the River *Zair*, which flows from the Lake of the same Name, and traverses the whole Country, are found in it the *Loango*, *Lelunda*, *Loanza*, and several others which flow from the Lake *Aquilanda*.

This Country is divided into several Kingdoms, and different People, the most remarkable of which are the Kingdom of *Congo* in the Middle; that of *Loango*, with the People *Anzican*, Northward; that of *Angola*, Southward; and Eastward the People called *Giaqui*, who inhabit the Mountains of the Sun towards the Dominions of the *Grand Negus*. The particular Kingdom of *Congo* is divided into six principal Provinces, which are *Bamba*, *Songo*, *Sundo*, *Pango*, *Batta* and *Pemba*, subdivided again into others which could not be easily particularized.

The City of *Congo* was once called *Baza* by the Natives; at present the *Portuguese* call it *St. Salvador*. It is situated on the River *Lelunda*, 50 Leagues distant from the Sea, and inhabited in Part by the *Congolans*, and in Part by the *Portuguese*, separated from the first in a particular Quarter of the City.

The Capital of *Loango* bears the same Name. It is situated on the Coast at the Southern Extremity of the Kingdom, in an Island made by a small River.

The Capital of *Angola* is *Longo*, or *Engaze*, situated on the River *Loango*, at the Northern Extremity of the Kingdom, 70 Leagues distant from the Sea.

Note, That the People are very ignorant, but easy and tractable, particularly towards the Sea; they are extremely strong. The *Giaqui* are great Thieves, and Antropophages like the *Anzicans*. I was intimately acquainted once with one of my Countrymen, who was sent Missionary into those Parts, and lived 15 Years among those poor People, before the King of *Portugal* expelled all the *French* from those Parts, who told me that he found it as difficult to dissuade them from eating human Flesh, as to instruct them in the Principles of the Christian Religion; but that after much Fatigue he succeeded in both: That he had gained so great an Ascendancy over them, which he attributed in Part to their natural Docility, that they did not dare to return to their vomiting for Fear he should know it; though at the same Time he perceived very well that their depraved Appetite craved after it; and when he suspected that some of them had fed themselves with that unnatural Food, he used to chide them very severely for it; and they thought then, that they could have Recourse to no better Means to appease his Anger, than to their Tears and great Demonstrations of a sincere Repentance. They are all very

black, except the *Portuguese* Children, who are only brown.

Note also, That these Kingdoms are governed each by its King, called *Mani* by his Subjects. There are also Governors in each Province for the Administration of Justice, to whom they give likewise the Name of *Mani*, which signifies Lord, with the Surname of the Province he is Governor of, as *Mani-Laonda*, *Mani-Coanza*, &c.

The King of *Congo* is the most powerful; and his People have so great a Veneration for him, that they never speak to him but kneeling. The Kingdom is hereditary in his Family, and only the Male Children can pretend to the Crown to the Exclusion of the Female. The Governor of *Batta* is the most considerable of the Kingdom, and his Court is very little less numerous than that of the King.

The King of *Loango* is also very much respected by his Subjects: That of *Angola* is almost as powerful as that of *Congo*, though he pays a Sort of Tribute to him; the Governors he keeps in each Province are called *Sobas*.

Note again, That some Relations inform us, that these three Kings have received the Light of the Gospel, and that there is even a Bishop at *Loanda*; but the People are mixed, the one being baptized, and the other Idolaters still.

A more particular Description of all these Countries is as follows.

BIAFARA.

The Kingdom of BIAFARA, contains *Biafara*, *Borca*.

The Kingdom of GABON, contains *Gabon*, *Corisco*, *Ma-ceira*.

The Kingdom of PONGO.

The Kingdom of MEDRA, contains *Medra*, *Median*, *Tebeldera*, *Guidan*.

The Kingdom of MACOCO.

The Kingdom of MUJAC.

CONGO.

The Kingdom of CONGO, contains *Pemba*, Province. *S. Salvador*, *Lelunda*, *Bamba*, Provin. *Motolo*, *Laonda*, *Batta*, Prov. *Agisymba*, *Gangac*, *Sunda*, Prov. *Betequa*, *Pango*, Prov. *Cundi*, *Angote*, *Songo*, Prov. *Malemba*, *Bommo*.

The Kingdom of ANGOLA, contains *Engaze*, *Maffirgan*, *Mochima*, *Quicongo*, *Ronguela*, *Coyla*.

The Kingdom of LOANGO, contains *Loango*, *Sette*, *Mayumbe*, *Katte*, *Sollage*.

The Country of the GIAQUI, contains *Zair*, *Dagar*, *Vamba*.

EMPIRE of MONOMOTAPA.

This Country is called by some the Empire of *Monomotapa*, by others *Benomotapa*, and *Benomotaxa*.

Most Authors contradict one another, on the Extent of this Empire, particularly Northward; but without taking Part in their Differences, I'll follow blindly the most modern Maps, and say that it extends from the 13 Deg. 30 Min. of northern Latitude to the 31; and from the 43 Deg. 30 Min. of Longitude, to 57 Deg. 30 Min. so that it must have 350 Leagues in its greatest Extent from North to South, and 150 in its greatest Breadth.

It confines Northward with the Mountains of the Moon, which part it from the Empire of the *Monomugi*, and from the Kingdom of *Malemba*; on the three other Sides it is environed with the *Cafrery*.

The Climate is temperate; the Soil very fat, and fertile in Rice, Sugar-Canes, which grow in it without being cultivated, Fruit-Trees, and Meadows so large, and so frequent, that they render some Places uninhabitable. A great Quantity of Gold is found in it, not only in the Mines, but likewise in the Rocks and Rivers; in which, and Ivory, consists the Commerce of the Country.

The most considerable of its Rivers are the *Zair*, which springs Southward, and running Northward traverses the whole Country: Then, after it has passed through the Lake *Zachaf*, continues its Course Serpentine toward the South by East, after which it divides itself

itself into two Arms, the most Northern whereof retains the same Name, till it enters the Country of the *Cafres*, where it takes that of *Cuama*. The other, which passes through the capital City, is called by the *Portuguese*, *Rio de Spiritu Santo*. The River *Cumissa*, or of the *Child*, is found toward the South by West.

Note, That the People are witty enough, and very courageous, but inconstant, and subject to Revolts: They have a very great Respect for the Women, some of whom fight valiantly. It is even pretended that those Amazons have a particular Country Northward.

Note also, That this Country is under the Denomination of an Emperor, commonly called *Monomotapa*, to whom all the other Kings or Princes are subject or tributary. This Sovereign is much beloved and respected by his Subjects, and dreaded by his Enemies and the Wicked; for he is a very religious Observer of Justice, and punishes severely all Sorts of Crimes. He resides at *Monomotapa*, Capital of its Empire, situated on the *Rio de Spiritu Santo*: He has a Country Palace called *Zimbaos*, situated toward the Western Coast of the *Cafres*, which passes for one of the Wonders of the Country, being built of large Free-Stone; which is extraordinary, since all the other Houses of the Country are only built of Wood.

Note again, That it is pretended that all those People are Christians, and were baptized about 170 Years ago.

Empire of the MONOEMUGI.

This Empire, whose Situation and Extent are not exactly known, confines Northward with *Abyssinia*, Eastward with the Coasts of *Zanguebar*, Southward with *Monomotapa*, and Westward with the Kingdom of *Malembe*, and the Lake *Zambre*.

It has very near the Qualities of the Empire of *Monomotapa*, except that it is fuller of Mountains, including those of the Moon: The River *Cuama*, or *Zambre*, traverses it from East to West; by Means whereof a Commerce is carried on with those of *Quiloo*.

Note, That I presume that these People are not very different from the Subjects of *Monomotapa*: They don't much care for the Gold which grows among them.

Note also, That the Country is in the Power of a King, call'd *Monvemugi*, to whom all the other petty Kings are subject, or tributary: Part of the *Giaqui* are under his Domination.

Note again, That Idolatry still reigns in this Empire.

Here follows a more particular Description of these Countries:

EMPIRE OF MONOMOTAPA.

The Kingdom of MONOMOTAPA, contains *Monomotapa*, *Zedaya*, *Euggi*, *Mogar*, *Agrasede*, *Meach*, *Lotaya*, *Zimbro*, *Tialso*, *Adia*, *Garma*, *Cumissa*, *Samot*, *Vigiti*, *Magna*, *Mofate*, *Jouros*, *Vallonte*, *Belegura*.

The Kingdom of BUTUA, contains *Butua*, *Gebaghe*, *Castro-Portugal*, *Quitievij*, *Degir*, *Gicra*, *Rueved*, *Amarara*, *Derosara*, *Hagala*, *Ilure*, *Mairagasi*, *Armeta*, *Bera*, *Zet*, *Dobdel*, *Gallila*, *Carma*.

The Empire of MONOEMUGI, contains *Agag*, *Gamba*, *Astagoa*, *Leuma*, *Camur*, *Beif*, *Bagametro*, *Zembre*.

The Countries, or Coasts of the CAFRES.

This Country, which some call *Casrery*, has very near the Figure of a Horse-Shoe, which environs the Empire of *Monomotapa*, Eastward, Southward, and Westward. Some confine it, on either Side, at the Height of the Tropick, and others make it to extend along the Coast from *Augra de Negro*, on the western Shore of *Ethiopia*, under the 14 Deg. 30 Min. of southern Latitude, to *Punto do Sal*, on the eastern Shore, about the 18 Degree of the same Latitude, including the famous Cape of *Good Hope*: So that its Coasts have more than 1000 Leagues of Circuit: Its Extent in Breadth is very irregular; for in some Places it is more than 100

Leagues broad, and in others not 50.

It confines, outward, with the Ocean; and inward, with the high Mountains, call'd the *Mountains of the Moon*; and with those by the *Portuguese* call'd *Montes Fragosos*, which part it from *Monomotapa*.

The Climate is very temperate, except towards the Cape of *Good Hope*, where sometimes an excessive Cold is felt, because of the violent Winds, and of the Snow those high Mountains are almost always cover'd with. The Soil is almost every where uncultivated, and sterile in all Things except Pasture and Flowers, with which most of the Vallies are cover'd. Cattle are numerous enough there but lean, and the Sheep have Hairs instead of Wool; Southward, Travellers say, that it is the poorest Country of the World; Eastward, towards *Sofala*, there is Gold, not only in the Mines, but likewise in the Rivers.

It is water'd with a great Number of Rivers, among which the most considerable are those of the *Zambre*, *de Spiritu Santo*, of *Cumissa*, of *St. Blaise*, of *St. Ambrose*, the *Green River*, and that of *St. Mary*.

The City of *Sophala* is very advantageously situated in an Island, which is in the Middle of a little Gulph, into which falls a little River called *Sophola*; it is situated on the Eastern Coast, about the 20 Degree of Latitude, near the Coast of *Zanguebar*.

Note, That the *Cafres* are wild, brutish and cruel: They live in Mountains and Caves like Beasts; those who inhabit the temperate Zone are less black than the others; they eat Rice, Flesh and Fish. There is very little Commerce carried on in this Country, except *Sophola*, where the People are more tractable. This Commerce consists in Gold and Ivory, which the Natives change for Stuffs, &c.

Note also, That as to the Government, this Country is in Part subject to *Monomotapa*, and in Part to the King of *Mataman*, the third Part is under the Domination of the King of *Sophola*, who is *Portuguese*, or tributary of the *Portuguese*, who are Masters of the Capital, because they have built a Fortrefs which commands the Port. Among the People, who are more advanced Southward, some have their particular Princes, or chuse Lords to govern them; the others live without King, without Faith, and without Law.

Note again, That most of these People have no Religion; those who inhabit the Kingdom of *Sophola*, and some Part of the western Coasts are *Mahometans*: There are also some Catholics among the *Portuguese*.

Coasts of ZANGUEBAR.

We know under the Name of *Coasts of Zanguebar*, the whole Extent of the Country, called by the Antients *Barbaria Regia*; which contains the Kingdoms of *Mon-galle* or *Angoche*, of *Mozambick*, of *Quiloo*, of *Mombaze*, of *Melind*, and the Territories of some petty Kings, as *Lamon*, *Pata*, &c. situated in this Order ascending from South to North.

This Country extends from the Equator, to the 18 Degree of Southern Latitude, may have 450 Leagues of Coasts, and 60, 80, or 100 in Breadth.

It confines Northward with the Coasts of *Ajan*; Eastward with the Ocean; Southward with the *Casrery*; Westward with the Territories of *Prester John*.

The Climate in general is unwholsome, and particularly in the Kingdom of *Quiloo*. The Land is low and marshy, and does not produce sufficiently what is necessary for Life; and if it was not for the great Commerce of Gold and Ivory carried on there, I believe the Country would not be so much frequented as it is. It notwithstanding produces Millet, Rice, Pulses, Oranges, and Lemons: It feeds Oxen, Goats, and Sheep, which are so big and so fat, that one of their Tails weighs as much as 30 Pounds: There are found in it wild Beasts, Fowls, and a vast Number of Elephants; and it has Mines of Gold, Silver, and other Metals.

The River *Quilmanca* is the most considerable among those which bathe that Country; the others are those of *Melind*, of *Mombaze*, of *Quiloo*, *Del Gado*, of *Mozambick*, and of *Cuama*.

Note, That the People of this Country are much more tractable than the *Cafres*, because of the Frequentation of the *Europeans*. They are black, and feed themselves with the Flesh of wild Beasts, with Milk, and with Pulses, and wild Fruits. They carry on a great Commerce of Gold and Ivory.

Note also, That the Kingdoms I have marked, and others which are so inconsiderable, that they do not deserve to be particularly mentioned, have all each their King, by whom they are governed, and who are almost all Tributaries of the *Portuguese*.

Note again, That the Natives are either *Idolaters*, or *Mahometans*, according to the Doctrine of a certain *Zaid*, *Haly's* Nephew; so that the *Turks* believe them Hereticks in their Faith.

The King of *Angoscia*, or *Mongalle*, is supposed Tributary of the *Monemugi* and a *Mahometan*. He resides in the City of *Angos*, Capital of his Dominions.

The King of *Mozambick* is also a *Mahometan*; but several petty Kings and Lords live in that Kingdom without Religion. The *Portuguese* are Masters of the Capital, and of the Island in which it is built.

Though this Island be pretty sterile, it is notwithstanding very well inhabited, because of its great Commerce.

Inchot says, That the King of *Quiloo* is tributary of the *Monemugi*; he is of the Sect of the *Mahometans Ezemoraides*; his Subjects follow his Belief, or are Idolaters. The Island *Quiloo*, where he resides, is very agreeable and fertile, but the Climate is unwholesome. The City is adorn'd with fine Houses built by the *Arabs*. The *Portuguese* plundered it once, and ever since the King pays them a Tribute of 1500 Marks of Gold.

The King of *Monbaze* is extremely dreaded, and respected by his Subjects. He believes himself one of the most powerful Princes of the Earth, and promises to himself no less than the Conquest of the whole World; notwithstanding which a Handful of *Portuguese* routed all his Subjects. He is a *Mahometan*, and a great Enemy of the *Christians*; his Subjects are either of the same Sect, or Idolaters.

The King of *Melinde* is so much respected by his Subjects, that when he appears in publick, the Ladies sing his Praises before him, and make a Kind of Symphony in striking Brass Bassons with Ivory Sticks. He is a very great Friend of the *Portuguese*, with whom his Subjects trade in all Liberty, and with a great deal of Honesty. He resides at *Melinde*, Capital of his Kingdom, and situated on the Sea-Shore, with a very fine Port, where the *Portuguese* have built a Fortrefs which commands it entirely; and eighteen or twenty Churches in the City; which shews that the *Catholic* Religion is professed there, tho' the King be a *Mahometan*, and his Subjects a Mixture of *Mahometans* and Idolaters.

The other petty Kings are *Mahometans*, except some Princes, whom some Relations make *Catholic*s. They reside in the Capital Cities of their Kingdoms, which are not strong.

Here follows a more particular Description of all these different Countries.

The *CAFRERY*, contains *Sofala*, *Bucone*, *Maracone*, *Deger*, *Mataca*, *Sena*, *Buro*, *Zimbaos*, *Inbaqua*, *Davagul*, *Cortada*.

COASTS of ZANGUEBAR.

The Kingdom of *MONGALLE*, contains *Mongalle*, *Agache*, *Quiloane*, *Monia*, *Dud*.

The Kingdom of *MOZAMBICK*, contains *Mozambick*, *Pinda*, *Sdrincapa*, *Querimba*.

The Kingdom of *QUILOA*, contains *Quiloo*, *Camu*, *Simis*, *Sabia*, *Xango*.

The Kingdom of *MONBASSE*, contains *Monbazze*, *Oygna*, *Butaapa*.

The Kingdom of *MELINDE*, contains *Melinde*, *Gazze*, *Oya*, *Lamon*, *Pata*, *Chelicia*, *Amarmockdy*, *Padragnum*, *N. D. Monasterium*.

COASTS of AJAN.

This Country, which the Antients called *Azania Regia*, is called by the *Arabs*, the Country of *Ajan*, and *New Arabia*; we commonly call it the Coasts of *Ajan*.

It extends from the Equator to the 12 Deg. of Latitude, between the 63 and 70 of Longitude; so that it may have 300 Leagues of Coasts on the Ocean; as far as Cape *Gardafay*; and 140 from that Cape to the Streight of *Bebelmandel*. Its greatest Breadth is of about 150 Leagues, and its lesser of 60.

It confines Northward with the Kingdom of *Dancali*, and the Streight of *Bebelmandel*; Eastward with the Ocean; Southward with the River *Quilmanca*, which parts it from *Zanguabar*; and Westward with the Dominions of *Prester John*.

It is fertile in Wheat, Millet, Barley, and various Sorts of Fruits and Pastures; and therefore feeds a great Quantity of Cattle, as Horses, Cows, Goats, and Sheep. It also produces Honey, Wax, Gold, and Ivory.

Among its Rivers the most remarkable are the *Quilmanca*, *Magadoxo*, and *Zeila*: Westward of the City *Magadoxo* is found the Lake of the Monks, with an Island, and a City in the Middle of it, which bears the same Name.

This Country is divided into four principal States, viz. the Kingdom of *Adel*, which is the largest, and the most Northern; that of *Adea*, which is in the Middle; and that of *Magadoxo*, with the Republick of *Brava*, which is the most Southern.

Note, That the Inhabitants of this Country are of three Sorts: Some are white towards the Coasts, some black towards *Abyssinia*, and others called *Beduini*, of *Arabian* Extraction, who are Vagabonds, live without Laws, without Care, and are all Thieves.

The King of *Adel* is in great Esteem among the *Mahometan* Princes, because he is always at War with the *Great Negus*, on whom he makes sometimes Prisoners, and whom he sends to those Princes for Slaves. The King and his Subjects are *Mahometans*, and great Enemies of the *Christians*: He resides in the City of *Adel*, Capital of his Dominions, situated on a River in the Middle of the Kingdom.

The King of *Adea* is Tributary of the *Negus*, and a *Mahometan*, as well as all his Subjects. It is believed that he resides at *Baraboa*, a City situated on an Arm of the River *Quilmanca*; in the Province of *Granza*, these People are a Mixture of Idolaters and Christians.

The King of *Magadoxo* is also a *Mahometan*, and all his Subjects by his Example, being all of *Arabian* Extraction. He resides in the City *Magadoxo*, situated on the Coast, and in a very commodious Place for the Commerce of the *Indies*.

The Republick of *Brava* is the only one known in *Africa*. The City which is situated on the Coast, between *Baraboa* and *Magadoxo*, is governed by twelve Xequi, chosen among the most antient of the Families of the seven Brothers, by whom it was founded. It is Tributary of the *Portuguese*, and the Inhabitants carry on a great Commerce of Gold, Silver, Ivory, Ambergrease, Wax, &c.

COASTS of ABEX.

All Authors have given to this Country a different Extent, and various Limits; but without espousing any of their Opinions, I'll say that what we know at present under the Name of Coasts of *Abex*, made once Part of the *Trogloditick Arabia*, and since Part of the Kingdoms of *Barnagas* and *Trigrumabon*, depending of *Prester John*.

This Country extends from the Streight of *Bebelmandel* to the Mountains which part it from *Egypt*, about the 22 Degree of Latitude; so that it takes up more than 350 Leagues of Coasts on the Red Sea; and has not 50 in its greatest Breadth, and 20 in its lesser. It is almost all desert and uncultivated, because of its excessive Heat and Want of Water. The Climate is burning and unwholesome; the Soil sandy, and sterile, particularly Northward.

It is divided into two Parts; the most southern contains the Kingdoms of *Dancali*, which is much less uncultivated than the other Part, and depends yet of the *Negus*. Its People, notwithstanding, are almost all *Mahometans*, through Contagion, having no other for their Neighbours.

The northern Part is in the Power of the Grand Seignor, who keeps a Beglerbeg in the City of *Suaquen*, situated on the Coast of the Red Sea; he is called at the Porte, the *Beglierbeg Bashaw of Abassia*.

The City of *Ercoco*, on the same Coast, and the Island *Mafua* over-against it, are of this Government. All the Inhabitants follow the Doctrine of *Mahomet*, even the Subjects of the *Grand Negus*.

A more particular Description of these Countries, is as follows:

Coasts of AJAN.

The Kingdom of *ADEA*, contains *Magadoxo*, *Bandel*, *Migiate*, *Zochet*, *Island of the Monks*, *Orgabra*, *Barramaa*, *Quilmanca*, *Barraboa*, *Brava*, Rep.

The Kingdom of *ADEL*, contains *Adel*, *Ara*, *Zeila*, *Barbora*, *Meta*, *Bardara*, *Afuma*, *Bandel-Dagoo*, *Camura*, *Velha*.

Coasts of ABEX.

The Kingdom of *DANGALI*, contains *Degibeldara*, *Degibelcora*, *Vella*, *Suaquen*, *Ercocco*, *Mezua*.

ISLES OF AFRICA.

Island ZOCOTRA.

Eastward of Cape *Gardafuy*, is found under the 86 Deg. of Longitude, the Island *Zocotra*, which may have 45, or 50 Leagues of Circuit.

The Climate is very hot, the Soil dry and pretty sterile, having nothing recommendable but Aloes, called of its Name *Zocotrina*, and *Sanguis Draconis*, which it produces in Abundance.

Note, That this Island is in the Power of the King of *Fartach*, in *Arabia*, who keeps in it a *Xequi*, or Governor. The Inhabitants are Idolaters, and adore the Moon; notwithstanding which they have a great Respect for the Cross, which they place honourably in their Temples, though they have no Knowledge of *Jesus Christ*; they say only, that their Ancestors have learned them that Practice.

Note also, That these People are ignorant, lazy, cowardly, and mistrustful, but above all, great Enemies of the *Turks*.

The Island MADAGASCAR.

This Mand is one of the greatest and richest of the whole World. The Natives give it the Name *Madagascar*, i. e. the *Island of the Moon*. That of *St. Laurent* was given to it, because discovered on that Saint's Day; and the *French* call it *Ile Dauphine*.

It is situated Eastward of the Coasts of *Zanguebar*, and of the *Casrery*, between the 11 and 16 Deg. of southern Latitude; and extends from the 72 Deg. of Longitude, to the 81; so that it may have about 350 Leagues in its greatest Extent from North to South, i. e. from Cape *Natal*, to Cape *St. Mary*; 120 in its greatest Breadth; and 900 of Circuit.

The Climate is wholesome enough and temperate: The Soil very fertile in Fruits, as Oranges, Lemons, &c. and in Pulses. It produces Rice, Cotton, Sugar, Ginger, Saffron, the Iguana, and other very good Roots; and also Wax and Honey. It has Mines of Gold and Silver; and several Trees grow there which are very rare among us, as *Libony*, *Brasil-Wood*, red, yellow, and white Sanders. Lions, Elephants, Camels, and several other Animals are so common in it, that sometimes a Sheep has been given for a Sheet of Paper, and four Cows for a poor Jacket.

The Middle of this Island is full of Forests and Mountains, from which flow several Rivers, the greatest of which are, *Janibarou*, *Maroucou*, and *Macabarou*.

It has several very commodious Ports, viz. *Anton-gil*, *Vingagora*, *St. Andrew*, *St. Augustin*, *Antipera*, the Port of the *Galeons*, &c.

It is said that this Island is divided into five or six Kingdoms; but we know but very little of them.

Note, That those who inhabit the Middle of the Island, are brutish, wild, and without Faith, like the *Casres*; they go quite naked, and dwell in very low Huts. Those towards the Coasts are a little more tractable; and all love Pleasure to Excess: They are witty enough, strong, and courageous. Their Women are not very sparing of their Caresses, and the Husbands are extremely well pleas'd, when an *European* do them the Honour to lie with their Wives.

Note also, That some are Idolaters, or without the least Shadow of Religion, and those towards the Coasts, *Mahometans*.

The Isles COMORRA, &c.

Between the western Coast of *Madagascar*, and those of *Zanguebar*, are found the Isles of *Comorra*, and several others less considerable, as those of *Querimba*, *Anisa*, *Juan*, *Nuova*, which will be found in my particular Description.

The Isles of *Comorra* are situated between the 11 and 13 Deg. of Latitude, towards the 72 and 73 of Longitude.

They produce Rice, Banana's, Cocoa-Nuts, Oranges, Lemons; and feed Cows, Goats, Sheep, Pigeons, Hens, &c.

Note, That the Inhabitants of these Isles are tractable enough, and trade freely with the *Portuguese* of *Mozambique*.

Note also, That they have each a King, which every Ship at its Arrival, is oblig'd to acknowledge with a Present. And none but the King wears Cloaths and Shoes, all his Subjects going naked, except that they hide what Modesty forbids to expose to publick View.

Note again, That they are almost all *Mahometans*; the rest are Idolaters, and live without Faith, and without Laws, like Beasts, in Caves, particularly towards the Middle of the Land.

Towards the Coasts of *Zanguebar*, is found under the 6 Deg. of southern Latitude, the Island *Zanzibar*, from which the whole Country has borrow'd its Name. It may have about 90 Leagues of Circuit. The Island *Pemba*, situated under the 4 Degree, has more than 110 Leagues of Circuit; that of *Monfia* has 50.

These Isles produce Rice, Miller, Lemons, Oranges, and Sugar-Canes, but the Inhabitants have not the Wit to purify the Sugar. They feed a great Quantity of Cattle, in which consists their Commerce with those of the main Land.

Note, That each of these Isles has its particular King, who are made tributary of the King of *Portugal*. These Kings, and their Subjects, are all *Mahometans*.

Note also, That the Natives of these Isles are lean, puny, Enemies of War, applying themselves to Agriculture and Commerce. Their Women love to be adorn'd with Chains, Bracelets, Ear-Rings, and other Jewels.

The Island ST. THOMAS.

At 50 Leagues Distance from the main Land of the Kingdom of *Biafara*, is found the Island *St. Thomas*, which has given Name to the Gulph in which it is situated under the Equator.

Its Figure is almost round, and some say that it may have 45, and others 60 Leagues of Circuit.

The Climate is unwholesome for Foreigners, but not for the Natives: The Soil produces all that's necessary for the Life of the Negroes, but not of the *Europeans*; for it has neither Corn nor Wine, but Maiz, Palm-Trees, Potatoes, and a great Quantity of Sugar.

Note, That the *Dutch* conquer'd this Island from the *Portuguese*, who retook it afterwards, and keep a Governor in the City *Pavaosan*, which is the Capital. The Inhabitants are most of them Catholick, and there is even a Bishop in the Capital City.

The *Island of the Prince*, was thus called by the *Portuguese*, because the Prince of *Portugal* had the Revenue thereof.

It is situated at the North by East of that of *St. Thomas*, under the 2 Deg. of Latitude, and the 32, 30 Min. of Longitude; and has about 25 Leagues of Circuit.

The Climate is wholesome, and the Soil very near like that of the *Island St. Thomas*. It is in the Power of the *Portuguese*, and the Inhabitants are all Catholic.

The *Island of Fernando Poo*, is situated still further into the Gulph of *St. Thomas*, between that of the *Prince*, and the Mouth of the *Rio des Camarones*, in the main Land, it is very near as big as that of *St. Thomas*.

Its Climate and Soil is like that of the *Island of the Prince*, and its Government and Religion likewise the same.

The *Island Annobon*, was thus called because discovered the first Day of the Year.

It is situated under the 28 Deg. of Longitude; and the 2, 30 Min. of southern Latitude.

Its Extent, Soil, Government, and Religion, is very little different from that of *Fernando Poo*.

The other Isles which are in that Sea of *Ethiopia*, are very little inhabited, therefore I'll say nothing of them, and content myself with putting their Names in my particular Description.

ISLES OF CAPE-VERD.

These Isles, which the Antients have called *Gorgona*, *Gorgade*, and *Hesperides*, are call'd by us, *Isles of Cape-Verd*, because they are over-against that Cape, Westward.

Some Authors pretend that there is twenty of them, but we reckon but six principal; the more advanced Northward, are those of *St. Anthony*, and of *St. Vincent*, then advancing always Southward, *St. Lucia*, *St. Nicolas*, the *Island of Salt*, of *Bona vista*, of *May*, *St. James*, *Del Fuego*, and *Bravo*.

They are situated Westward of *Nigritia*, between the 353 and the 357 Deg. of Longitude, extending from the 13 Deg. 30 Min. of Latitude, to the 19.

The *Island St. James*, is the greatest of them all, and may have 45 Leagues in its greatest Length from South by East, to North by West; 10 in its greatest Breadth; and 95 of Circuit.

The *Isles of St. Nicolas*, and of *St. Lucia*, may have each 25 or 26 Leagues in Length, 7 or 8 in Breadth, and 60 of Circuit. The Length of the first is from North by West to South by East; and that of the other from North by East to South by West.

The *Isles St. Vincent*, and *St. Anthony*, have not above half the Extent of these, and the five others are still lesser; since the greatest of them has not 10 Leagues in Length, and 20 of Circuit.

The Climate of these Isles is generally hot, and unwholesome. The Soil is stony, and almost sterile, as those of *Salt*, *Bona vista*, and of *May*. The first has but wild Horses, the last has also a great Number of them; but has a still greater Number of Goats; so that the Skins and Salt, are what render them considerable. The others are less sterile; and produce Rice, Maiz, Ignana's, Banana's, Lemons, Oranges, Cocoa-Nuts, Pomegranates, Wine, and Cotton: And it must be observed, that these Fruits are gathered twice a Year. They feed a great Number of Cattle and Fowls; and the Inhabitants salt the Flesh of those Animals, and send it to several Places.

Above these Isles there are some Places where the Surface of the Sea is covered with a certain Herb, very near like the *Sarsago* of the *Portuguese*. It cannot be discovered where the Roots of those Herbs lay, because they are far from the main Land, and the Sea has no Bottom in the Places where they are found; notwithstanding which, Mariners take all the Care imaginable to avoid them.

Note, That when these Isles were discover'd by a *Genoese*, they were all uninhabited, and began to be inhabited but 30 Years afterward, when the *Por-*

tuguese had a little frequented them. They are still in their Power, and the King of *Portugal* keeps a Governor in the City of *St. James* situated in the *Island* of the same Name. This City is not only Capital of the Isles; but likewise of all the Places, which the *Portuguese* possess on the Coast of the *Higher Guinea*. It is also an Episcopal See, Suffragan of *Lisbon*.

Note also, That none but the *Catholic* Religion is publicly profess'd in these Isles. There are some Negroes who know neither God nor Devil.

A more particular Description of the Isles of *Africa*, is as follows:

In the *Red Sea* are the Isles *Suaquen*, *Mazua*, *S. Pietro*.

The *Island ZOCOTRA*.

The *Island MADAGASCAR*, contains *Vingagora*, *Cady*, *Angoada*, *Cacambut*, *Mannajara*, *Manialuso*, *Manapatan*, *Manatenga*, *Ananbolo*, *Rama*, *Manasias*, *Atabasta*, *St. Vincent*.

Isles of COMORRA, contains *Comorra*, *Garidsa*, *Loura*, *Cenbracas*, *Mayotte*.

Toward the Coasts of *Zanguebar*, are the Isles *Zanzibar*, *Monfia*, *S. Roch*, *Pemba*, *Querimba*, *Anisa*, *Da Nova*, *Baixos de Judia*.

Towards *Guinea*, the Isles *St. Thomas*, of the *Prince*, *Fernando Poo*, *Annobon*.

The Isles of *CAPE-VERD*, are *St. Jago*, *St. Nicholas*, *St. Lucia*, *St. Vincent*, *St. Anthonia*, *Del Fuego*, *Do Sal*, *De bona vista*, *Brava*, *Mayo*.

ISLES CANARY.

Westward of the *Biledulgerid*, are found the Isles called at present *Canary*, of the Name of the greatest among them. The most learned Geographers are persuaded that they are the same which the Antients call'd *Fortunate*, though they had placed them further Southward.

They are ten or twelve in Number, among which there are seven principal, viz. the two most eastern, which are *Lancelotte* and *Forteventura*; then advancing Westward, *Canary*, *Teneriff*, *Gomer*; the *Island Del Ferro*, and that of *Palma*, which are the two most western.

They extend from the first Deg. of Longitude, to beyond the 28 or 29, if we will speak of the four small ones, which are Northward of *Lancelotte*.

The *Island Canary*, which has given its Name to the others, is situated under the 3 Deg. 40 Min. of Longitude, and the 26, 30 Min. of Latitude. It has 13 or 40 Leagues in Length and Breadth, and 50 of Circuit.

The *Island Teneriff* is situated under the 2 Deg. 30 Min. of Longitude, and the 27 of Latitude; it has about 22 Leagues in its greatest Length from South by West to North by East. Its Breadth is very irregular, from 3 Leagues to 15; so that its Circuit is of about 60 Leagues.

The *Island Forteventura* is situated under the 5 Deg. 30 Min. of Longitude, and the 27 of Latitude. It has about 25 Leagues in Length from South by West to North by East; its Breadth is still more irregular than the preceding one; for in the Middle it has but 4 Leagues, and was once divided by a Wall, which travers'd its Isthmus. It may have 70 Leagues of Circuit, because of the two Gulphs it makes, very near like the Angle of a Cross of *Malta*.

The *Island Lancelotte* is situated under the 5 Deg. 45 Min. of Longitude, and the 28 of Latitude. It may have 13 Leagues in Length from South to North, 9 in Breadth, and 40 of Circuit.

The *Island Gomer* is under the first Deg. of Longitude, and the 27 of Latitude.

The *Island Del Ferro*, is between the first Meridian, and the 30 Min. of Longitude, under the 26, 45 Min. of Latitude.

The *Island of Palm* is under the 30 Min. of Longitude, and the 27 Deg. 40 Min. of Latitude.

Each of the other three Isles may have to the Utmost, 10 Leagues in Length, 5 in Breadth, and 25 of Circuit.

The Climate of these Isles is very good, though a little hot. The Soil is very fertile in all Things, and produces

duces Wheat, Barley, Millet, and delicious Wines, which are exported throughout all *Europe*; and likewise all Sorts of excellent Fruits, as Figs, Oranges, Lemons, Pomegranates, Sugar, &c. It feeds a great Quantity of Goats and wild Affes.

In the Island *Teneriff*, there is towards the Middle a high Mountain, by the *Portuguese* call'd *El Pico*, which rises like a Sugar-Loaf, and passes for the highest of the whole World.

The Soil of the Island *del Ferro* is very dry, and sterile in some Places, because there is no Water in it; but the Almighty, who provides for all our Wants, has caused to grow there a Tree, whose Trunk is about two Fathoms round, and has its Leaves long and narrow, always green, and always cover'd with a Dew which drops into Stone-Basons, which the Natives make on Purpose to receive the Water, which is very good; they using it for all their Necessities, and for the Cattle. This Island is very well known, because we make our first Meridian to pass through it.

Note, That the Inhabitants of these Isles are almost all *Spaniards*. The Natives are great Epicures; and some Relations say, that the few left retired into the Mountains, where they live in Caves, on the Milk of their Goats.

Note, also, That they are Subjects of the King of *Spain*, who keeps a Viceroy, or Governor, in the City of *Canary*, situated in the Island of the same Name. There is in that Capital a Royal Audience, a Bishop, and an Inquisition.

Note, again, That none but the *Catholic* Religion is professed in these Isles.

The Island MADEIRA.

This Island, which *Niger* supposes to be one of the *Isles of Juno* of the Antients, is call'd *Madeira* by the *Portuguese*.

It is situated under the first Deg. 30 Min. of Longitude, and under the 32 Deg. 30 Min. of Latitude: It may have 20 Leagues in Length, 7 or 8 in its greatest Breadth, and 48 of Circuit.

The Climate is much more temperate than in the *Canaries*, and the Soil still more fertile in Corn, Wine, Sugar, and Fruits: It is besides water'd with five or six Rivers. There are found in it the same Sorts of Cattle, Fowls, and Trees, as in the *Canaries*. *Grammar* says, that when it was discover'd by the *Portuguese* in 1420, it was all cover'd with Wood; that they set Fire to it, which lasted seven Years, after which they found the Soil very fertile; but at present it does not produce half so much as it did then.

Note, That the Inhabitants are much more tractable than those of the *Canaries*, and are almost all *Portuguese*.

Note, also, That the King of *Portugal* keeps a Governor in this Island, who resides at *Fonzal*, Capital of *Madeira*, which is also an Episcopal See, Suffragan of *Lisbon*.

Note, again, That there is no other Religion professed here but the *Catholic*.

At the North by East of *Madeira* is found the Island of *Porto Santo*, of about eight Leagues of Circuit, depending of this as well for the Spiritual, as for the Temporal. The Soil is very little less fertile; and it produces Wax and Honey, which are esteemed the best in the World.

The Isles AZORES.

The Isles *Azores* may be ranked among those of *Africa*, though very distant from it.

They are found between the 36 and 40 Degree of Latitude, and between the 346 and the 354 of our Longitude: But the *Dutch* make their first Meridian to pass at the Island *Terceira*, which is the most considerable of all.

The Climate is very wholesome, and the Soil very fertile in Corn, Wine, and Fruits. There are found in

them Fountains of hot Water; and one, in particular, which petrifies Wood.

These Isles are nine in Number, and the most considerable of all is the Island *Terceira*, it having 15 or 16 Leagues of Circuit; and its capital City is *Augere*, which is an Episcopal See.

Note, That these Isles began to be inhabited by the *Portuguese* about the Year 1449; and ever since that Time they have remained in their Power, except during the Usurpation of the Kings of *Spain*.

Note, also, That all the Inhabitants profess the *Catholic* Religion.

A more particular Description of these Isles is as follows:

Isles CANARY.

The Island *CANARY*, contains *Canary*, *Tidle*, *Gadler*.

The Island *TENERIF*, contains *Laguna*, *Santa Cruz*.

The *Isles Gomer*, *Palma*, *del Ferro*.

The Island *FORTEVENTURA*, contains *Forteventura*, *Tarafalo*, *Lanega*.

The Island *LANCELOTTE*, contains *Lancelotte*, *Porto de Naos*, *Porto de Cavalos*.

The *Isles Gratiofa*, *Alegria*.

The Island *MADEIRA*, contains *Fonzal*, *Moncerico*, *Santa-Croce*.

The *Isles de Porto Santo*, deserted, the *Salvages*.

The *Isles AZORES*, are *Tercera*, *S. Miguel*, *S. Maria*, *S. Georgio*, *del Pico*, *Fayal*, *del Cuervo*, *de Flores*.

In the *ETHIOPICK OCEAN*, Eastward, are the *Isles de Amirante*, 4. *Mascharenas*, 2. *Os Sete Irmanos*, *Corpo Santo*, *S. Francisco*, *Diego*, *Rodrigue*, *Maurice*, *Bourbon*, *Jouan de Nova*, *Cosmoledo*.

WESTWARD.

The *Isles S. Matthew*, *Ascension*, *S. Helena*, *S. Helena nova*, *Tristan da Cunha*.

Note, That at the particular Desire of a great Number of my Subscribers, I having travell'd thro' the different Parts which compose the antient World, or our Continent, and carefully examin'd all it contains, as most capable to flatter our Curiosity, and to give us a right Notion of *Geography*; I'll pass to the *other Continent*, so call'd, because on the Surface of the Globe it is separated from our Continent by the Sea; *New*, because it was not known 300 Years ago; *Inferior*, because in the Vulgar's Opinion it should be under ours; *Western*, because it is described Westward of the first Meridian, in the Map of the Terrestrial Globe; *America*, from the Name of one of the first Navigators who discover'd it; and lastly, the Vulgar gives it the Name of *West-Indies*; *Indies*, because its Riches equal those of the true *Indies*; and *West*, because they are Westward of *Europe*.

A M E R I C A.

AMERICA, extends from the 63 Degree of northern Latitude, at the Streight of *Hudson*, to that of *Magellan*, under the 54 of the Southern; and from *Agu-beza del Gato*, below the Island of *California*, under the 240 Degree of Longitude, to the most advanced Point of the *Brasil*, under the 348.

Northward it confines with the Sea, which parts it from *Greenland*, by the Streight of *Hudson*, &c. Eastward with the *Atlantick Ocean*; Southward with the Streight of *Magellan*, which parts it from *Terra del Fuego*; and Westward with the *Pacific Ocean*, or *South-Sea*.

Its Situation in three different Zones, is the Cause that its Climate is various, and participates of Heat or Cold, in Proportion to the Situation of each Country. The Soil is also various, and produces several Sorts of Corn and Fruits which we know, and several others unknown to us. So much Gold and Silver is found in it, that those precious Baits attract the Commerce of almost all the People of *Europe*. It breeds almost all Species of Animals, ferocious, wild, and domestick, which have been known since the Creation.

It has three very considerable Rivers; the greatest whereof is that of the *Amazons*; the second, is that of *Plata*, or of *Paraguay*, both rolling their Waters in the southern Part; the third is the River *St. Laurence*, which traverses all *Canada*, in the northern Part.

These two Parts are two great Peninsula's, which are join'd by the Isthmus of *Panama*, about eighteen French Leagues broad, and contain several Provinces.

Note, That the *Americans* are, in general, ingenious enough, but they are deceitful, and revengeful; and though they be very strong, are without Courage. Those who have no Commerce with the *Europeans*, are Wild and Anthropophage, living without Care; the others, who trade with the *Europeans*, or are Subjects to them, are more tractable. Some of these Savages go quite naked; others paint their Bodies of various Colours; and others cloath themselves with the Skins of Beasts; they love Dancing, and sleep in Hammocks; their common Arms are Bows and Arrows; some have Muskets, and other Arms, like the *Europeans*.

Note, also, That before the Coming of the *Spaniards*, *America* had its Kings, viz. those of *Mexico*, *Culbucan*, *Azcapuzalco*, of *Tezeuco*, &c. the *Inga's* of *Peru*, and the *Caciques*, or Captains, whom they used to chuse for their Commanders: Several surprising Things are related of *Montezuma*, last King of *Mexico*, whom the *Spaniards* murther'd to have his Treasures. At present the King of *Spain* is Master of a great Part of that new World, where he keeps two Viceroy's, one at *Lima* for the Southern Part, the other at *Mexico*, for the Northern. The King of *France* gives Laws to the best Part of *Canada*, called *New France*; and keeps a Viceroy, or Governor, in the City of *Quebec*, situated on the River *St. Laurence*. The Kings of *Portugal*, *England*, *Denmark*, and the *Dutch*, have each their Part of it; and the Inland Part is yet in the Power of the Natives, some of whom chuse Captains to govern them, and lead them to War: The others live confusedly without Guides, having neither Laws, nor fix'd Habitations.

Note, again, That those who have preserved their Liberty, are yet Idolaters; some adore one God, Creator of all Things; others adore the Sun, Moon, the Fire, &c. The *French*, *Spaniards*, and *Portuguese* profess the Catholick, Apostolical, and Roman Religion: The other *Europeans* profess each their Religion.

The *Spaniards* have five Archbishops in their District, viz. at *Mexico*, in the Province of the same Name; at *Lima*, and at *Plata*, in *Peru*; at *St. Domingo*, in the Island *Hispaniola*; at *Santa Fé de Bogotta*, in the Main Land: Under those Archbishops are thirty Bishopricks, which I'll distinguish in my particular Description. There are also two Inquisitions, and two Universities, one at *Mexico*, the other at *Lima*; and more than 400 Monasteries. The *French* have a Bishop at *Quebec* in *New France*, and the *Portuguese* one at *St. Salvador* in the *Brasil*.

SOUTH AMERICA.

This Part of the new World is a great Peninsula, which extends between the 292 and the 348 Degree of Longitude; from Cape *Cochibocoa*, under the 12 Deg. 30 Min. of northern Latitude, to the Streight of *Magellan*, under the 54 of the Southern: So that it may have 1330 Leagues in its greatest Extent from North to South, and 1140 in its greatest Breadth from East to West, and very near 5000 of Circuit.

It confines Northward and Eastward with the *Northern Sea*; Southward with the *Magellanick Sea*; and Westward with the *Pacifick* or *South-Sea*.

It is divided into seven principal Parts, which are, the *Main Land* or *Golden Castille*, *Peru*, *Tucumano*, *Chili*, *Magellanick Land*, *Paraguay*, *Brasil*, and the Country which is in the Neighbourhood of the River of the *Amazons*, and of the Rivers which disembogue into it.

MAIN LAND.

This Country, call'd once *Golden Castille*, is more advanced towards the North than all the others of *South America*, and contains the whole Extent of the Refort of the Chamber of *Panama*.

It extends between the 12 Deg. 30 Min. of northern Latitude, from the Isthmus of *Panama*, under the 292 of Longitude, to the 328 Deg. 30 Min. having Southward the Country of the *Amazons*, with *Peru*; and Northward the *Northern Sea*.

The Climate is extremely hot, and, notwithstanding, very wholesome, except towards the Isthmus of *Panama*, where the Land is very marshy, and the Heat would be insupportable, if not a little tempered by the northern Winds. The Soil produces but little Corn, but a great Quantity of Maiz, except in the Places where it is traversed with Marshes and Mountains; it is fertile enough in Pasture, and abounds in Cattle, as Cows, Sheep, Hogs, and others. It produces several Fruits unknown to us, as Potatoes, Ananas, *Indian Figs*, &c. but not equally every where. There is found in it a great Quantity of Gold, Silver, Copper, and Azure; Rocks of Emeralds, and some other precious Stones.

The most remarkable of its Rivers are that of *Oronoquo*, which springs from it, and traverses it thro' all its Course; those of the *Magdelen*, and *S. Martha*, which join together between the Governments of *Carthagen*a and of *St. Martha*: It has likewise the Lake *Parime* under the Equator, at the 319 Degree of Longitude, all environ'd with Mountains, 120 Leagues long, 40 or 50 broad, and which may have 300 of Circuit. A little higher the Lake *Cassipal*, under the 4 Deg. of Latitude, and which is more than 100 Leagues round; and another 30 Leagues distant from the Lake *Parime*, Eastward, and which may have 90 of Circuit.

This Province is divided into eleven Governments; seven of which are on the Northern Sea, going from West to East, viz. *Castilla d'Oro*, on the Main Land; *Carthagen*a, *Santa Martha*, *Rio de la Hacha*, *Venezuela*, *Nueva Andalusia*, and *Caribana*. The four others are found Southward of these, returning from East to West, in this Order, *Guiana*, *Paria*, *Nueva Granada*, and *Popayana*, in Part; the other Part is in the Government of *Peru*.

The capital City is *Santo Fé de Bogotta*, situated in the Province of *Nueva Granada*; it is an Archiepiscopal See, the Seat of a Governor, and of the Royal Audience of all the Main Land.

Note, That the Natives are well shaped, and of a Brass Colour; they go naked to the Waist: There are several Negroes among them, who have no other Profession than that of Thieving.

Note, also, That the King of *Spain* commands in that Province by his Governors, and the Bishops he sends thither.

Note, again, That there are always Missionaries in those Parts, to instruct the People in the Catholick Religion. The greatest Part of the Natives are yet Idolaters, especially towards the Middle of the Land.

PERU.

This is the greatest Treasure of the King of *Spain*, and the richest Jewel of his Diadem: It was fix'd to it in the Time of *Charles V.* after *Francis Pizarro* had discover'd it.

This precious Source of Metals is situated between the 292 and 316 Degree of Longitude; extending on the *South-Sea*, from the 5 Degree of northern Latitude, including the Country of *Popayana*, to the 26 Deg. of the Southern; so that it may have 660 Leagues of Coasts, 260 in its greatest Breadth from East to West, and 140 in its lesser.

It confines Eastward with *Paraguay*, and the Country of the *Amazons*, from which it is separated by its River, and that of *Maragnan*, which springs from it; Northward with the Main Land; Southward with the *Paraguay*, *Tucuman*, and *Chili*.

The Climate is various, because of the Disposition of the

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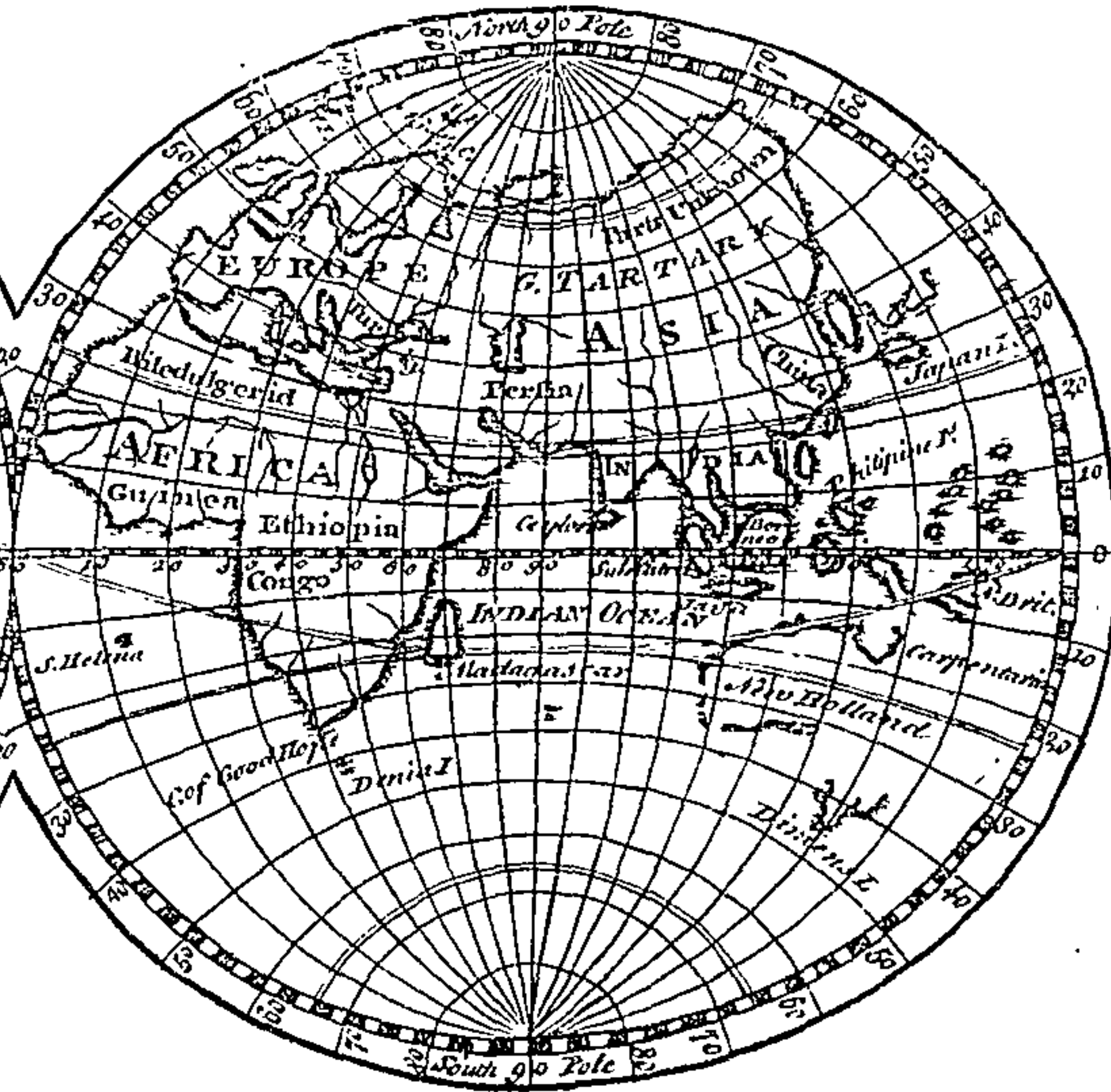
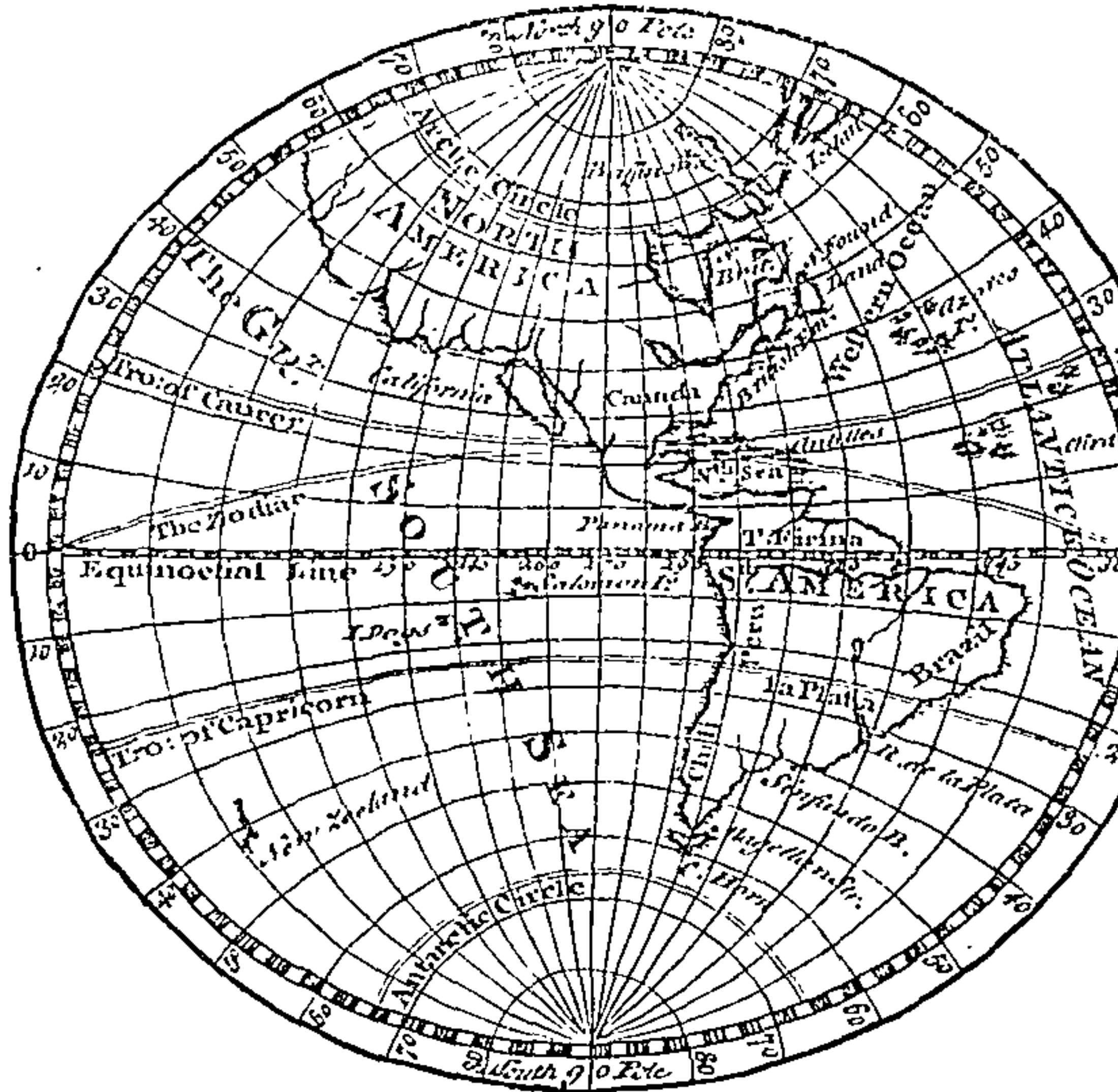
EUROPE.



ASIA.



A MAP OF THE WHOLE WORLD



AFRICA.



AMERICA.



the Country, which is traversed with high Mountains, diversify'd with very deep Vallies, and flat Champaigns. It is very hot at all Times in the Vallies, because it never rains there; a very great Cold is sometimes felt on the Mountains, because of the frequent and violent Winds: There are very few Rivers in it, and it has neither Fountains, nor Wells.

The Soil, though very dry, is fertile enough, particularly towards the Rivers, where grows Wheat, Maiz, Sugar-Canes, Cotton, and excellent Wine, in some Places. In the Vallies is found a Plant of a singular Virtue, call'd Cocoa, whose Leaf being put into the Mouth nourishes, and is a Preservative against Hunger and Thirst; but this is nothing in Comparison of the great Quantities of Gold and Silver found in its Mines, without reckoning those of Quicksilver, &c. which are of a great Revenue.

Among its Rivers and Lakes, there are some whose Bottom is all Salt, though the Water be sweet; it has also some Sources of hot Waters.

Peru is divided into three principal Governments, or Provinces, which are *Peru*, *Los Charcas*, and *Quito*: The first is in the Middle; the second is Southward, where is found the rich Mine of *Potosi*; and the third is Northward, subdivided into three small Provinces, which are *Quito*, Westward; *Los Quixos*, and *Pacamores*, Eastward; one at the North, the other at the South.

LIMA, or *Los Reyes*, situated on the Coast, is the Capital of the whole Province, and the Residence of the Viceroy of *South America*: It is honour'd with an Archiepiscopal See, a Royal Audience, and an University; but curst with an Inquisition.

Cusco, was antiently the Place where the *Inca's*, or Kings of *Peru*, kept their Court; and is, at present, an Episcopal See. *Plata*, in the Province of *Los Charcas*, is adorn'd with an Archiepiscopal See.

Note, That the Natives of *Peru* are simple enough; but inconstant, and without Faith; those who inhabit the Mountains, and near the Equator, are more ingenious; it is said that they are much addicted to Sodomy, and therefore despise and maltreat much their Wives, who work continually; and who, notwithstanding that ill Usage, are more modest, and more faithful to their Husbands, than the other *American* Women: These People are whiter than the *Spaniards* though they inhabit the Torrid Zone: They are commonly dressed with a Sort of Coat; and the Women wear long Shifts without Sleeves.

Note, also, That *Peru* was govern'd during 300 Years by Kings of the Race of the *Inca's*, before the *Spaniards* came into it: But *Pizarro*, and *Almagro*, Captains of *Charles V.* exterminated all that Royal Family, and subjected almost the whole Kingdom to the King of *Spain*; who sends thither a Viceroy, and Governors: The People who are not yet conquer'd, keep in the Mountains, where they chuse among them a Captain, or *Cacique*, to lead them to War.

Note, again, That all the King of *Spain's* Subjects follow the *Catholic* Religion; and the Natives, who have not been converted, believe that all the *Christians* are bad and cruel, imagining that they are all of the Humour of the *Spaniards*, whom they have seen exercising all Sorts of Barbarity: Therefore the *Manatians*, and the People who inhabit the Mountains of *Cusco*, kill all the *Christians* they can catch.

A more particular Description of *South America*, is as follows:

MAIN LAND.

CASTILLA D'ORO, contains *Panama*, Bishop. *Porto-Bello*, *Nombre de Dios*.

The Government of CARTHAGENA, contains *Carthagena*, Bishop. *S. Sebastiano*, *Cenu*.

The Government of SANTA MARTIA, contains *Santa Martha*, Bishop. *Baranpa*, Bishop. *Tamalague*, *Ocamu*.

The Government of RIO DE LA HACHA, contains *Rio de la Hacha*, *Le Rencheria*.

The Government of VENEZUELA, contains *Venezuela*, Bishop. *Nueva Valencia*, *Nueva Segovia*, *Tugillo*.

Nueva ANDALUSIA, contains *Comana*, *Acumacari*, *S. Thomas*.

CARIBANA, contains *Toupuramania*, *Moresbago*, *Sapite*, *Wadali*, *Cayenne*, a French Island.

GUIANA, contains *Manoa*, *Comalaba*.

PARIA, contains *Macurewaray*.

NUOVA GRANADA, contains *S. Fe de Bogotta*, Arch. *Juan del Lano*, *Trinidad*, *S. Christoval*, *Mtrida*, *Pampelona*, *Tocayma*.

POPAYANA, contains *S. Sebastiano*, *Carthago*, *Caramanta*, *Antiochia*, *Arma*.

PERU.

PERU, contains *Lima*, Archb. *Cusco*, Bishop. *Guanaga*, Bishop. *Oropesa*, *Moruro*, *Arequipa*, Bishop. *Valverde*, *S. Miguel*, *Guara*, *Arnedo*, *Guanuco*, *La Frontera*, *Miraflores*.

LOS CHARCAS, contains *La Plata*, Archb. *S. Cruz la Nueva*, *La Paz*, Bishop. *Tominus*, *Potosi*, *Porco*, *Cachaya*, *Tobisa*, *Arica*, *Carcollo*.

QUITO, contains *Quito*, Bishop. *Porto-Veja*, *Rio Bamba*, *Guyaquil*, *S. Miguel*, *Juen*, *Zamora*.

LOS QUIXOS, contains *Bacza*, *Junta de los Rios*, *Avilla de l'Oro*, *Zumaque*.

PACAMORES, contains *Valladolid*, Bishop. *Loyola*, *S. Jago de las Montanas*.

Part of the POPAYAN, contains *Popayan*, *Madrigal*, *Pasto*, *Agredi*, *Cali*.

TUCUMANO.

Herrera has placed this Province among those of *Peru*, because its Court of Judicature resorts to that of *Los Charcas*; but the Moderns make a separate Province of it.

It extends between the 303. and 317 Degree of Longitude, from the 23 to 37 of Latitude: So that it has about 280 Leagues in its greatest Extent from South to North; and more than 200 from East to West.

It confines Eastward with *Paraguay*, Southward with the *Patagons*, Westward with *Chili* and *Peru*, and Northward with the same Province, &c.

The Climate is temperate; the Soil fertile in Pasture, produces very fine Cotton, and feeds a vast Number of Sheep; but it has no Mines of Metals.

The most remarkable of its Rivers are those of *Plata*, *Desaguadero*, *Barbaranna*, and *Rio Vermajo*, or *Salado*.

Note, That the People are not so wild here, as in the other Provinces; they love Working, and do not get themselves so often drunk as the other *Americans*; but they are inclined to the original Vice of the Country, *i. e.* that they are vindictive when they have been offended.

Note, also, That Part of this Province is yet in the Possession of the Natives, who chuse from among themselves *Caciques*, or Commanders to govern them, and lead them to War. The other Part which the *Spaniards* have conquer'd, is in the Power of the *Catholic* King, who keeps a Governor in the City of *Jago del S. Estero*. This City, which was call'd *Varco*, is situated on the River *Plata*, is the Capital of the Province, and the Seat of a Governor, and of a Bishop.

Note, again, That the *Spaniards*, and most of the *Tucumans*, Subjects of the King of *Spain*, profess the *Catholic* Religion: The other People are Idolaters, and have neither Faith, nor Law.

CHILI.

This Country is call'd *Chili* by the Natives, *i. e.* Cold, in their Language, because the Climate is extremely cold by its Situation, which is between the 296 and 308 Degree of Longitude, extending along the Coasts from the 26 of Latitude to the 47: So that it has about 420 Leagues in Length from North to South, 150 in its greatest Breadth, and 90 in its lesser.

It confines Northward with *Peru*; Eastward with *Tucuman*, and the *Magellanic Land*, from which it is separated by a long Ridge of Mountains, call'd by the *Spaniards*, *Sierra Nevada de los Andes*; Southward with the *Patagons*.

The Climate is very near the same as in *Spain*; except in the Winter, which is sometimes so excessively cold,

cold, that it kills Men and Beasts, particularly on the Mountains; which, notwithstanding, the Soil is fertile enough in Corn and Maiz. It produces Wine like that of *France*, and a great Quantity of all Sorts of *European* and *American* Fruits. It has Mines of Gold, and the Meadows are covered with a great Number of Sheep, almost as big as Camels.

It has several Rivers which freeze during the Night, and thaw in the Day-Time, but they are not considerable.

This Province is divided into three other small ones, which are *Chili*, *Imperial*, and *Chicuito*. The two first are on the Coasts, one Northward, the other Southward; and the last is Eastward, separated from the two others by a Ridge of Mountains, called *Cordillera*.

The *City of Conception*, was once the Capital of *Chili*, and the Seat of a Royal Audience, which was afterwards transferred to *Peru*; but at present *St Jago* has that Advantage, being the Seat of a Governor, and of a Bishop.

Note, That the *Chilians* are ambitious, impatient, bold, and very brave. They bear easily all Sorts of Incommodities, are strong, tall, and well proportion'd. They exercise their Children to run, hunt, and to use Arms, the most considerable among them are those of the Valleys of *Arauco*, *Tucapel*, and *Puren*, which the *Spaniards* could never conquer. They are commonly covered with Skins of Beasts.

Note also, That the Province of *Chili* depends in Part on the Viceroyalty of *Peru*, under the Direction of a Governor, sent thither by the King of *Spain*, and in Part is in the Power of the Savages, who chuse from among them Caciques, or Captains to lead them to War, to administer Justice, and the publick Affairs.

Note again, That the *Spaniards* and some Natives profess the *Catholick* Religion; but the greatest Part of these last are yet Idolaters, and adore the Devil, whom they call *Eponamon*, i. e. Powerful.

MAGELLANICK LAND.

This Province, which the Natives call *Chiffa*, is called *Magellanick Land*, from the Name of the Person who discover'd it. Some call it *Country of the Patagons*, from the Name of its Inhabitants.

It is more advanced towards the South, than all the other Provinces of *America*, and extends like a Point into the Sea, called also *Magellanick*, between the 296 and 322 Deg. 30 Min. from the 36 Deg. of southern Latitude, to the *Streight of Magellan*, under the 54; so that it may have about 400 Leagues in its greatest Extent from East to West, and 360 from North to South.

The *Paraguay*, *Tucuman*, and *Chili*, confine it Northward; and the *Streight*, Southward.

The Climate of this Country is very cold, and the Soil not very fertile, except in Pastures and Forests.

Its Rivers are the *Desaguadero*, which comes from *Chili*, and passes in the *Tucumar*, and the *Rio de les Camarones*, which are pretty considerable.

The *Spaniards* had built two Cities on the *Streight*, the most considerable of which was called *San Philippo*, and the other *Nombre de Jesus*, but they are ruined. There is seen in it a great Rock, in Form of a Bell, call'd *Campana de Roldan*.

Note, That the *Patagons* are ten or twelve Foot high, strong, bold, and very swift. They love Hunting, and Dancing, are jealous of their Wives, live without Care, eat human Flesh, paint their Faces, cut their Hair like Monks, and cover themselves with Skins of Beasts.

Note also, That we know nothing of their Government, nor of their Religion. They only say that they fear a great horn'd Devil, which they call *Setebos*, and that when any Body dies, they see that great Devil accompanied with ten or twelve lesser, who dance round the Corpse.

PARAGUAY.

This Province, which the Moderns call *Paraguay*, from the Name of a River which waters it, is called by *Herrera*, *Rio de la Plata*, from the Name of another River more considerable than the first.

Some Antients have made it a Part of the *Brasil*, which they conducted as far as to the Mouth of this *Rio de la Plata*; at present the Moderns make of it a particular Country, which extends between the 309 and the 338 Deg. of Longitude, from the 21 of southern Latitude, to the 37; so that it may have about 500 Leagues in Length and Breadth.

It confines Eastward with the northern Sea; Northward with *Brasil*, and the Country of the *Amazons*; Westward with *Peru*, *Tucuman*, and the *Magellanick Land*; and Southward with the Ocean.

The Climate is very temperate and wholesome. The Soil very fertile in Corn, Fruits, and Cotton; has beautiful Meadows round its Rivers, which are in great Number, and Marshes full of Sugar-Canes. A great Quantity of Silver is found at the Bottom of *Rio de la Plata*, from which its Name has been form'd, which in *Spanish* signifies *River of Silver*. The Plant call'd *Capaciba*, whose Juice is a vulnerary Balsam, is found in it. It feeds a great Quantity of Horses, and other Cattle; and likewise Tygers, Bears, and other Animals, unknown to us, as the *Cerigons*, which have a certain Skin under their Belly in Form of a Sack, in which they carry their Young till they can walk.

In the great Number of its Rivers, there are six principal ones, viz. *Rio de la Plata*, *Paraguay*, *Parana*, *Uruguay*, *Rio Blanco*, and *Rio Vermejo*; the first receive the Waters of five others.

The *Spaniards* divide this whole Country into six principal Parts or Provinces, three of which are Southward, viz. *Rio de la Plata*, *Parana*, and *Uruguay*. The three others, *Paraguay*, *Chaco*, and *Guayra*, are Northward.

Note, That the Inhabitants of this Country are of the same Stature, Disposition, and Language, as the *Patagons*. They acquire such Habit of running while they are young, that they run as fast as a Horse on a full Gallop; so that the *Spaniards* had a great deal of Pains to settle there. These People are distinguished by various Names, and their Habitations, fifteen or sixteen Families living under the same Roof, supported by Trees in Form of a Hall.

Note also, That the King of *Spain* is almost entire Master of the whole Country; and there are but very few People who are not subject or tributary to him. He keeps a Governor there, who answers to the Viceroy of *Peru*, and resides in the *City of the Assumption*, Capital of the whole Country, situated on the River *Paraguay*; this City is adorn'd with a Royal Audience, and is an Episcopal See, as well as *Buenos Ayres*, and *Paraguay*, whose Bishops are Suffragan of the Archbishop of *La Plata*.

Note again, That Part of those who are Subjects of the King of *Spain*, profess, like the *Spaniards*, the *Catholick* Religion; the others are yet Idolaters, and know no God, but only fear the Devil, whom they paint with large Horns.

A more particular Description of all these Countries, is as follows:

TUCUMAN, contains *S. Jago del Estero*, Bishop. *Cordoba*, *La Punta*, *S. Miguel*, *Esteco*.

CHILI, contains *S. Jago de Chili*, Bishop, *Rapel*, *Quillata*, *Longotana*, *La Serena*.

CHUCUITO, contains *S. Juan de la Frontera*, *Mendoza*, *Orowante*.

The Province *DEL IMPERIAL*, contains *Imperial*, Bishop. *Argol*, *Chillan*, *Conception*, *Valdivia*, *Villa-Rica*, *Osono*, *Calbuco*, *Chiluc*, Island.

MAGELLANICK LAND, contains *San Philippe*, *Nombre de Jesus*.

PARAGUAY.

RIO DE LA PLATA, contains the *Assumption*, Bishop. *Buenos Ayres*, Bishop. *Santo Fe*, *Corrientes*.

PARANA,

PARANA, contains *Itapoa, Acaray.*

URAGUAY, contains *S. Salvador, the Conception, S. Xavier, Santa Anna.*

The Province of PARAGUAY, contains *Paraguay, Bishop. Villa Rica, Maracaju, Nostra S. de la Fé.*

CHACO, contains *the Conception.*

GUAYRE, contains *Ciudad-Real.*

B R A S I L.

Oforio says, that this Part of *America* was discovered in 1501, by *Alvarez Cabral*, a *Portuguese*, who after a violent Tempest, was thrown on these Coasts, where he erected a Column, with the Arms of *Emanuel King* of *Portugal*, his Master. Sometime afterwards the same King sent into it *Americus Vespucius*, for a more accurate Discovery.

It is the most Eastern of all *America*, since it extends between the 322, and the 349 Deg. of Longitude, from the first Deg. of southern Latitude, to the Tropick of Capricorn, so that it contains more than 800 Leagues of Coasts.

It confines Northward and Eastward with the northern Sea; Southward with the *Paraguay*; and Westward with the same Country, and that of the *Amazons*.

The Climate is hot, but very wholesome, and agreeable; the Soil produces Millet and Maiz, in a little Quantity, but it is very fertile in Pastures: It bears several Sorts of Fruits, as Oranges, and Lemons, Anana's, Acajou's, Araticou's, Potatoes, and several others unknown to us, as the *Aypi*, and *Mainoc*, of which they make Bread and Pap. Its greatest Fertility is in Sugar; it produces also Tobacco, and Trees, commonly called Brasil-wood, of which there are whole Forests. It has several Animals unknown to us, as the *Tarufy*, which wears an Armour of Scales on his Back, which wraps him up in such a Manner, that nothing is seen but his Head, Feet, and Tail. The *Pigritia*, which does not walk on his Paws, but creeps so slowly on his Belly, that it cannot travel a hundred Paces in fifteen Days.

The most remarkable among the Rivers which all spring from, and roll their Waters in that Country, are the *Miary*, *Pinara*, *Taboucourou*, *Siope*, that of *S. Francis*, and several others.

Note, That the *Brasilians* are cruel, vindictive, and very violent; but they are very patient and abstemious. They are bold, and even rash on Occasions. Those who inhabit the Inland Country are brutish, wild, anthropophage, and always at War with their Neighbours. They love Dancing and Hunting, go naked, and paint their Body and Face of different Colours. They live in several Huts, and sleep in Hammocks.

Note also, That the Middle of the Country is inhabited by several different People, among which the *Topinambas*, the *Margajas*, the *Ouitafe*, the *Paraibas*, and the *Tapouyis*, are the most considerable. The one are govern'd by a Chief, whom they chuse among the most notable; the others, viz. the *Maramonins*, *Coriges*, &c. live without Law, and without Conductor.

The *Portuguese* are Masters of all the Coasts; and of about 50 or 60 Leagues further into the Inland. This Part is divided into fourteen *Capitaneries*, eleven of which are found on the Eastern Coast, ascending from South to North in the following Order: First, *San Vincente*, *Rio Janeiro*, *Spiritu Santo*, *Port Seguro*, *Ilheos*, *Balria*, *Seregippe*, *Pernambuco*, *Tamaraca*, *Parayba*, and *Rio Grande*. The three others are situated on the Northern Coast, also in Order, going from East to West, and are *Siara*, *Maragnan*, and *Para*. There is a Governor in each *Capitanate*, all of them under the Direction of the Viceroy of the whole Country, who resides at *St. Salvador*, Capital of the whole Province, and situated in the Bay of all Saints, on the Eastern Coast, it is also an Episcopal See.

Note again, That the *Brasilians* adore neither God nor Idols, and have neither Temple, nor Form of Religion. Some among them believe, notwithstanding, that there is a God, who makes the Thunder roar.

They believe that there are evil Spirits which come to torment them. The *Catholic* Religion is professed in that Part of the Country, possessed by the *Portuguese*.

Country of the AMAZONS.

I call by this Name, not only the *Guiana* of the Antients, but likewise, the whole Extent of the Country which is in the Neighbourhood of the great River of the *Amazons*, between the 300 and the 328 Deg. of Longitude, and extending from the second of northern Latitude, to the 16 of the southern; so that it may have near 560 Leagues in Length, and near 300 in Breadth.

This Country confines Eastward with *Brasil*; Northward with the *Main Land*; Westward with *Peru*; and Southward with the *Paraguay*.

The Climate is hotter here than in any other Part of *America*. The Soil is fertile in Meadows, but we know very little else of the Country, except that it must have Mines of Gold, because the Natives change that Metal for *European* Commodities.

The River of the *Amazons* traverses all this vast Country, from West to East, rolling its Waters in an Extent of more than 700 Leagues, forming several Isles in its Course, as towards *Peru*, that inhabited by the *Homagui*; the Island of the *Tapinambous*, and several others at its Mouth, which is 50 or 60 Leagues broad. This River receives several other great Rivers, Southward, as *Magnarun*, *Amarumaye*, *Tapy Catua*, *Cusignares*, *Cayana*, and *Topaysa*, the lesser whereof is more than 200 Leagues long; and Northward the *Rio Negro*, which is a Branch of the *Oroonoko*.

Several different People inhabit this Country, the principal Provinces whereof are *Caribana*, *Aparia*, *Apana*, and *Coropos*, Northward of the great River; *Cayana*, *Mataya*, *Paranayba*, &c. Southward of it.

Note, That these People, like the *Brasilians*, are wild, cruel, and anthropophage. They go quite naked Men and Women, without Shame. They have always their Bodies painted of different Colours, and covered with several little Stones, thrust into the Skin from their Infancy. They dwell under Trees where they suspend their Hammocks.

Note also, That every one of these People lives as he pleases, for they have neither Chief, nor Conductor; doing themselves Justice for the Wrongs they have received. For when a Man has killed another, the Relations of the Deceased kill the Murderer if they can catch him.

Note again, That they have no Idea of God, nor any Tincture of Religion, living like Beasts, having nothing human but the Figure.

Here follows a more particular Description of the *Brasil*:

The *Capitanate* of BAYA, &c. contains *S. Salvador*, Bishop. *Pitange*, *Real*.

The *Capitanate* of ILHEOS, contains *Ilheos*, *Camamu*.

The *Capitanate* of PORTO-SEGURO, contains *Porto-Seguro*, *Santa Cruz*.

The *Capitanate* of SPIRITU SANTO, contains *Spiritu Santo*, *Parayba*.

The *Capitanate* of RIO JANEIRO, contains *Rio Janeiro*, *S. Sebastian*, *Angra de los Rejes*, *Caza de Piedra*.

The *Capitanate* of S. VINCENT, contains *S. Vincent*, *S. Paulo*, *Hitauchi*, *Santos*, *Reinarvilla*.

The *Capitanate* of SEREGIPPE.

The *Capitanate* of PERNAMBUCO, contains *Olinda*, *S. Miguel*.

The *Capitanate* of TAMARACA.

The *Capitanate* of PARAYBA.

The *Capitanate* of RIO GRANDE, contains *Natal*, *Prandibe*.

The *Capitanate* of SIARA, contains *Siara*, *S. Jago*, *Caplors*, *Camucipi*.

The *Capitanate* of MARAGNAN, contains *Maragnan*, *Ille*, *Jemipara*.

The *Capitanate* of PARA, contains *Para*, *Commota*.

NORTHERN

NORTHERN AMERICA.

This second Part of the new World is, in the Opinion of some, a great Peninsula, whose Extent and Limits, Westward and Northward, are not certainly known, towards which, some Geographers imagine, that it is join'd to the *Arctic Land*.

The *Dutch* make it to extend from the Streight of *Anian*, under the 195 Deg. of Longitude of the first Meridian of the *Azores*, i. e. about the 187 of the Island *Del Ferro*, to the 330; and from the Isthmus of *Panama*, under the 7 Deg. 50 Min. of Latitude, to beyond the 63.

But because the Kingdoms of *Anian*, and of *Quaira*, the *New Albion*, and other Countries, towards the North by West, which the *Dutch* include in it, are not yet exactly known; our most modern Geographers, make the *Northern America* to extend but from the 340 Deg. of Longitude; so that it must have, in their Opinion, more than 1100 Leagues from South to North, and 1150 from East to West, that is to say, 400 Leagues less than in the *Dutch Maps*.

It may be thereby easily judg'd, that its Limits are uncertain on those Sides; it is only known that the *Streight of Hudson*, and the *Christian Sea*, part it from the *Arctic Lands*, and that it has the Northern Sea Eastward, and the South-Sea South-Westward.

The Climate and the Soil are also various, according to the different Dispositions of the Country; but in general, it is rather cold than hot, and the Soil more fertile in Meadows than in Corn and Fruits. The Rains which fall during the Months of *June*, *July*, *August*, and *September*, hinder the few Grapes found in it from ripening. It has several Mines of Gold and Silver.

The most remarkable of its Rivers are those of *St. Laurent*, of *Chucagua*, and *Del Norte*. It has several Lakes, as the *Sweet Sea*, the *Superior Lake*, the *Lake Puant*, the *Lakes Erie*, *Ontario*, or *Frontenac*, of *S. Peter*, of *Champlain*, and of *Nicaragua*.

Without including the Countries of *Anian*, of *Quivira*, and the *New Albion*, the *Northern America* may be divided into five principal Parts, which are *Mexico*, *New Mexico*, *Florida*, *Canada*, and the Isles depending thereof.

MEXICO.

This Country, which bears the Name of its Capital City, has received that of *New Spain*, since the *Spaniards* have rendered themselves Masters of it.

It is situated between the Sea of the same Name, and the South-Sea, extending from South by East to North by West, more than 600 Leagues, from the River *Chagre*, in the Isthmus of *Panama*, to the Mouth of *Del Norte*, between the 22 and the 30 Deg. of Latitude; and the 124 and the 192 of Longitude. Its Breadth is very irregular.

It confines Eastward with the Sea of *Mexico*; Northward with its Gulph, *Florida*, and *New Mexico*; and with the *South-Sea*, Westward and Southward.

The Climate is very temperate and wholesome, though in the Torrid Zone, it is as cold as in *France*. The Winds and Rains reign often there, and sometimes with great Impetuosity. The Soil is very fertile in Wheat, Maiz, Pastures, and excellent Fruits. A great Abundance of Gold and Silver is found there, not only in the Mines, but likewise in the Rivers. It feeds beautiful Horses, Cows, Sheep, Goats, which bear twice a Year. And breeds a very little Bird, lesser than a Cock-Chaffer, covered with beautiful Feathers, which feeds on the Dew, and the Fragrancy of Flowers, and which fixing himself on the Branch of a Tree, falls asleep in the Month of *October*, and does not awake till that of *April*.

Among its Rivers, the most remarkable are the *Panuco*, which falls into the Gulph of *Mexico*; the *Esquitlan*, *Mexico*, and *Lofyopes*, which disembogue into the South-Sea. Its greatest Lakes are, the *Nicaragua* and *Mexico*.

Mexico is divided into three principal Prefectures, or Audiences. The first is that of *Mexico*, which is in the Middle; the second is that of *Guadalajara*, or *New Gal-*

licia, which is Westward; and the last, that of *Guatemala*, Eastward.

The Audience of *Mexico*, contains seven small Provinces, two of which are on the South Sea, viz. *Mexico* and *Méchoacan*, two others on the Gulph of *Mexico*, which are *Panuco* and *Jucatan*, and the three last on both Seas, viz. *Los Angeles*, *Guaxaca*, and *Tabasco*.

The Audience of *Guadalajara*, contains likewise seven small Provinces, which are *Guadalajara*, *Zacatecas*, *Nueva*, *Biscaya*, *Cinaloa*, *Culiacan*, *Chiametla*, and *Xalisco*. The three first are found thus in Order, Eastward of the four others, going from South to North; and these follow likewise one another in their Situation, in descending from North to South.

The Audience of *Guatemala*, extends in eight small Provinces, viz. *Guatemala*, *Soconusco*, *Chiapa*, *Vera-Paz*, *Honduras*, *Nicaragua*, *Costa Rica*, and *Varagua*. The first and second are situated on the South Sea; the third is Southward of *Tabasco*; the fourth and fifth are on the Sea of *Mexico*; and the three last following one another on both Seas, in going from North to South by East.

The City of *Mexico* is the Capital of the whole Country, and passes for one of the fairest of the whole World. It is situated, according to *Herrera*, between two great Lakes, round which there was once more than 50 pretty large Cities. One of these Lakes has its Water salt, and the other has it sweet, though there be a Communication between them. But *Thomas Gage*, in his Relation of the *West-Indies*, says, that about the Year 1636, the Viceroy of *Mexico* had caused the Waters of these Lakes to take another Course; which has been the Ruin of more than 30 Boroughs. It is adorned with the Residence of the Viceroy of *Northern America*, with a Royal Audience, an Archiepiscopal See, an University, and a Mint.

We may judge of the Magnificence of this City by what *Gage* relates of it: He says, that in his Time there were in it 30 or 40,000 *Spaniards*, who were so proud, and so rich, that more than half of them kept a Coach, and sometimes more. Those Coaches and the Harnesses of the Horses were so magnificent, that several of them were covered with Plates of Gold and Silver curiously chased, and enriched with precious Stones, and lined with Cloaths of Gold; the Horses being even sometimes shod with Silver.

Note, That the *Mexicans* are very civil and docile: They are faithful and sincere to their Friends; but behave otherwise towards those who use them ill. They are learned in their Manners, and very industrious; they play upon two Instruments, paint, and make Pictures with the Feathers of those small Birds heretofore mentioned, called *Cincons*. The *Spaniards* who inhabit this Province, are extremely proud in Cloaths and Jewels, particularly the Inhabitants of *Mexico*.

Note also, That this Kingdom was antiently governed by Kings native of the Country; the two last were *Montezuma* and *Quicustanoc*, or *Quabutimoc*, who was elected in his Place. *Ferdinand Cortez* conquer'd it for the King of *Spain* in less than four Years, i. e. from the Beginning of the Year 1518, to near the End of 1521. The *Mexicans* say, that their Oracles had foretold the Coming of a foreign Nation, who should conquer their Country, and as soon as the Fleet of *Cortez* was arrived, King *Montezuma* sent him Embassadors as if he had been a God; then that Captain, the better to deceive these People, caused the whole Artillery of his Admiral-Ship to be fired, which so surprized them, that they thought he had brought Thunder along with him, and used to call him the Son of the Sun.

Note again, That the *Catholic Religion* is professed in *Mexico*, as in all the other Dominions of the King of *Spain*, though some of the Natives are yet Idolaters.

NEW MEXICO.

This Province was the Country of the antient *Nave-tecas*, who came to settle in *Mexico*. *Antony Espejo*, who discover'd

discover'd it, gave it the Name of *New Mexico*.

It is situated between the 240 and 242 Degree of Longitude, above the 27 of Latitude.

Neither its Extent, nor its Limits Northward, are well known; Eastward it is separated from *Canada*, and *Florida*, by high Mountains; Southward it confines with *Mexico*; and Westward with the *Varmeil Sea*, which parts it from *California*.

The Climate is mild and wholesome; the Soil fertile in Pasture, and produces Maiz and Legumes. It has Mines of Silver and other Metals; and likewise Turquoises, Emeralds, and Crystal. It feeds Oxen, Cows, Hogs, Horses, Harts, Deers, Hares, &c. Its Lakes are full of excellent Fish.

Besides the River *del Norte*, which traverses it from North by East to South by West, are found those of *Couches*, *Tecon*, and some others less considerable.

Note, That this Country is inhabited by a great Number of different People, very tractable, who live by Agriculture and Hunting.

Note, also, That they are each govern'd by their Cacique, or Captain, whom they chuse from among the most courageous and strongest of them. The *Spaniards* have Settlements in some Places; and the King of *Spain* keeps Governors in the City of *Santa Fé*, situated on the River *del Norte*, in the Middle of the Country.

Note, again, That those different People have also different Religions; for the Inhabitants of the northern Part have a great Number of Idols, which they place in Oratories, and to which they carry Victuals; others adore the Sun; others believe in one God, Author of all Things, and who is in Heaven; and others have neither Idols, nor Religion. The *Spaniards* profess theirs in all Liberty, and work daily in the Conversion of those People with vast Success.

The Countries of ANIAN, and of QUIVIRA.

These Countries are so little known, that I'll speak but very little of it, to avoid being accused of telling Romances.

The Climate is cold; the Soil fertile but in Meadows, where is fed a great Number of Cows, which are all the Riches of the Inhabitants; who eat the Flesh, make Stuffs of the Hairs, Shoes, and cover their Houses with the Skins; Tools with the Bones; Cups, and several other useful Things with the Horns. They have also great Dogs, which serve instead of Pack-Horses, to carry Burthens. The Natives have no fix'd Habitation; but they search the Places which seem most commodious to them, where they fix their Houses, like Tents in a Camp.

Note, That these People have Kings, but poor, and without Retinue.

Note also, That some adore the Water, because they believe that it contributes towards rendering the Soil fertile: Others the Planets, the Trees, &c.

FLORIDA.

This Province was antiently call'd *Jaquaza*; but *John Pona* of *Leon*, who discover'd it on *Palm-Sunday*, which the *Spaniards* call *Pascua de Flores*, gave it, for that Reason, the Name of *Florida*.

It is situated on the Gulph of *Mexico*, extending from the 15 Degree of Latitude to the 40; and from the 269 of Longitude, to the 297 Deg. 30 Min. So that it has about 330 in Length from East to West, 180 in Breadth, and more than 700 of Coasts.

It confines Southward with a long Ridge of Mountains, which parts it from certain People unknown, and from *Virginia*; Westward and Eastward with the *Northern Sea*.

Its Climate is pure and temperate; the Soil very fertile; and the frequent Dews which fall make it produce a great deal with but little Labour. The Inhabitants sow Maiz twice a Year, viz. in *March* and *July*, which is gathered in *June* and *October*: It produces several Sorts

of Fruit-Trees and Legumes, and feeds a great Quantity of Animals and Fowls. The Rivers are full of Fish, and the Sea Shore of several Sorts of testaceous Fishes. There are also found in it Crocodiles, and large Serpents, who devour Travellers and Swimmers.

The Mountains of the *Apalache* have Mines of Gold, though the *Spaniards* say the contrary, because the Savages will not discover those Mines to them, as they did at first those of *Peru*.

Among its Rivers that of *Chucagua* is the greatest, and *Rio Grande* the richest, because very fine Pearls are fished in it. They fish also Gold and Silver in that of *May*.

Note, That the Inhabitants of *Florida* are naturally white, but after they have anointed themselves with a certain Oil, their Colour changes into an Olive. They are tractable enough, strong, and well proportioned: They love War, go naked, and paint their Bodies with several Colours.

Note, also, That these People who are yet Masters of the greatest Part of the Country, are governed by their *Paraoufts* or Captains, who preside in their Assemblies, and lead them to War. Among the *Paraoufts* there is one who is above all the others, walks in Pomp, and with a great Retinue, so that he is like the King of the Country.

The *French* had built the Forts of *Charlefort* and *Carolina* in 1562, and in 1564, one at the Mouth of the River *May*, the other on that of *Port Royal*; but they abandoned it during the Civil Wars, which happened soon after in *France*. The *Spaniards* have built the Forts *St. Matthew*, and *St. Augustin*, and possessed once all the Coasts; but they have deserted them by degrees; and the *English* having settled themselves at *Carolina*, which was the principal Fortrefs of the *French*, are Masters at present of a long Tract of Land, especially since they have began to send Colonies into that Part of the Country which they have called *Georgia*, where the *Spaniards* seem determin'd to disturb their Settlements, as being too near their own.

Note, again, That the Inhabitants adore the Sun, the Moon, &c. they have a very great Respect for their Priests, whom they call *Joanas*. The *Spaniards* and *English* profess each their own Religion.

A more particular Description of all these Countries is as follows.

MEXICO, or NEW SPAIN.

The *Audience* of MEXICO, contains *Mexico*, Arch. *Chiantla*, *Catalutla*.

MECHOACAN, contains *Mechoacan*, Bishop. *Calima*, *Sacatula*, *S. Felipe*.

PANUCO, contains *Panuco*, *S. J. de los Valles*.

TLASCALLA, contains *Los Angeles*, Bishop. *Almeria*, *Vera Cruz*.

GUAXACA, contains *Anteguera*, Bishop. *S. Jago*, *Spiritu Santo*.

TABASCO, contains *N. S. de la Vittoria*.

YUCATAN, contains *Merida*, Bishop. *Valladolid*, *Salamanca*.

The *Audience* of GUADALAJARA, contains *Guadalajara*, Bishop. *Zaporaco*, *Chutiquipaque*, *Quaxacatlan*.

ZACATECAS, contains *Zacatecas*, *Nombre de Dios*, *Ellerena*, *Durango*.

NUEVA BISCAYA, contains *Santa Barbara*, *Endebe*, *S. Juan*.

CINALOA, contains *S. Felipe*, *S. Jago*.

CULIACAN, contains *Culiacan*, *S. Miguel*.

CHIAMETLAN, contains *Aquacara*.

XALISCO, contains *Xalisco*, Purification. *Compostella*.

The Audience of GUATIMALA.

GUATIMALA, contains *S. Juan de Guatim*, Bishop. *La Trinidad*, *S. Salvador*, *S. Miguel*, *Xerez*.

SOCONUSCO, contains *Gucvetlan*.

CHIAPA, contains *Ciudad-Reale*, Bishop. *Chiapa*.

HONDURAS, contains *Valladolid*, Bishop. *Gracias a Dios*, *S. Pedro*, *Truxillo*.

VERA PAZ, contains *Coban*.

NICARAGUA, contains *Leon*, Bishop. *Granada*, *Nicoya*, *Jaen*, *Realejo*.

COSTA-RICA, contains *Carthago*, *Araniver*, *Castro d'Austria*.

VERAGUA, contains the *Conception*, *Santa Fé*, *Nota*.

NUEVO MEXICO, contains *Santa Fé*, *Sevilleta*, *Sotarro*, *Reicoromedo*, *Zaguato*, *Acoma*.

FLORIDA, contains *St. Matheo*, *S. Agostino*, *Hirriga*, *Vitacuclo*, *Saturioa*, *Carolina*, *Georgia*, *Melilot*, *Coca*, *Tascaluca*, *Talomeco*, *Colima*, *Nagatexa*.

CANADA.

We commonly understand by the Name *Canada*, all the Extent of the Country contained between *Florida*, and the Northern Limits of *America*, i. e. from the 33 Degree of Latitude to the 63, tho' properly speaking, the Country called *Canada* be but a small Province, which is Southward of the great River, and Westward of its Gulph.

This large Country may be divided into two principal Parts, one Southern which contains all *New France*, and other most Western Countries, yet unknown to us; and the other Northern, which contains the Land of *Laborador*, *Estotland*, and *New Wales*.

NEW FRANCE.

This Part of *America* was call'd *New France*, by *John Verazzan*, a *Florentine*, sent by *Francis I.* King of *France*, to take Possession of it in his Name. It had been discover'd by some Sailors of *Britanny* 19 Years before.

It is pretended, that it extends between the 33 and 55 Degree of Latitude: The Beginning of its Longitude is not very well known, but it extends as far as to the 329 Degree.

Though this Country be in the Middle of the Temperate Zone, the Climate is cold: The high Forests, and the great Number of Lakes found in it, feed that Cold during half the Year, in the eastern Part, and cause Fogs, Rains, and Snows, which last from the Month of *November* to that of *April*; notwithstanding which, the Soil is fertile enough in Maiz and Pastures; and produces several Sorts of Fruit-Trees, as Vines, Peach-Trees, &c. It produces likewise some Tobacco; it feeds several Species of Animals, as Harts, Fallow-Deers, Orignacs, Castors, wild Cats, and several others unknown to us. It abounds with all Sorts of salt and freshwater Fish, as Whales, Salmons, Trouts, Pikes, Carps, Eels, and all Sorts of testaceous Fish.

The great River *St. Laurence* traverses this Country from West to East; the other most considerable Rivers are those of *S. Marguerite*, of *Saguenay*, the *Three Rivers*, that of the *Meadows*, &c. which come to disembogue into it Northward; those of *Poubatan*, of *South*, of *North*, of *Pentegauet*, of *Mississippi*, and several others which disembogue into the Sea.

Northward of the great River are found the Province of *Saguenay*, and several different People yet unknown; Southward of it, going along the Sea, from North by East, to South by West, are found thus, one after another, the following Provinces, viz. the particular *Canada*, *Acadia*, the Country of the *Souriquois*, the Country of the *Etchemins*, *New England*, *New York*, *New Sweden*, *Virginia*, and between these last Provinces, and the grand River, the *Iroquois*, *Algonquins*, *Hurons*, towards the Lake *Frontenac*, and a great Number of other different People.

Note, That the *Canadians* are in general witty enough for their Country, and have a great Memory: They are not bold, though they would be accounted such, because Courage is esteemed among them a true Mark of Nobility. Sometimes ten or twelve Families live in the same Cabbin without Envy, Quarrels, and Mistrusts; which shews the Docility of their Genius. They live without Care; are born white, but the Oils with which they anoint themselves render them tawny. They love Hunting, good Cheer, Smoaking, and Dancing, spending sometimes Nights and Days in Feasting: They say that the Smell of Musk is stink-

ing, and eat with Pleasure an old Bit of musty Grease. When they are sick they are let Blood at the Belly: They cloath themselves with Skins of Beasts, wear Bracelets and Necklaces, and paint their Faces with various Colours. The *Iroquois*, and *Armouchiquois*, are cunning and treacherous, and cruel to their Enemies. The *Hurons* are Friends of the *French*. The Women wear Necklaces, Bracelets, and certain other Toys which they call *Matachias*.

Note also, That these People are govern'd by their *Sagamo's*, or Captains, whom they chuse from among the eldest of the most illustrious Families. When they chuse a *Sagamo*, they give him the Name of the last dead; and pretend thereby, to make him revive in the Person of his Successor. The young People eat at his Table, are always in his Retinue, and follow him to War and Hunting; all they get belong to him, but married People give him but Part of it. The *Sagamo* must take Care to provide for the publick Good, and likewise that all Sorts of Provisions, Arms, hunting Dogs, &c. be found for those of his Retinue.

The Extent of the Government of each *Sagamo*, terminates, most commonly at some River or Bay. In the general Assemblies, none but the *Sagamo's* have a deliberative Vote, and some *Autmoins*, i. e. Priests, who are also their Physicians.

The *Europeans* who are settled in that Country, have their respective Governors, whom they are obliged to obey.

Note again, That the Natives who have not received the Light of the Gospel, are Idolaters, and it seems they have some Idea of God, whom they call *Atabocan*, Author of all Things; they say that the World having been lost in the Waters, one called *Messou* repair'd it. But they tell that Fable with so many ridiculous Circumstances, that the Relation thereof seems insupportable. They believe the Immortality of the Soul, the Reward of the Good, and the Punishment of the Wicked.

The *SAGUANAY*, which bears the Name of a River which runs through it from North to South, is the Province of *New France*, the best inhabited by the *French*, because of the City of *Quebec*, which is the Capital. This City is situated on the left Shore of the great River *St. Laurent*. It is the Place of Residence for the Governor, and an Episcopal See. It has a sovereign Council, to which all the inferior Courts of all the Colonies resort. It is divided into higher and lower City. The Bishop's Palace, that of the Governor, the Cathedral Church, and the Parochial, are in the first: The King's Magazine, that of the Company, and all the Merchants are in the last. There is a Castle built on the Points of Diamonds, at the Foot whereof there is a little Harbour.

A League off *Quebec*, is built the Fort *Silleri*, to favour the Commerce of the *Algonquins*. Westward there are two *French* Colonies; the first is that of the three Rivers; the other is that of the Island of *Mont Royal*. There is a Royal Justice in both, from which they appeal to the Royal Council of *Quebec*.

The Particular *Canada*, *Acadia*, the *Louisiane*, and other Countries inhabited by the *French*, have nothing particular; therefore I'll content myself with marking in my particular Description, the Forts and Habitations they have in those Parts.

NEW ENGLAND.

New England, which was once the Country of the *Amacchiquois*, is Southward of the *Etchemins*. The *English*, who are Masters of it, gave it its new Name, and likewise those of several Cities of *England*, to the Towns they have built on the Coasts.

Boston is the Capital of the Country, and the Residence of the Governor. *Newhaven* is a particular Government, and the Seat of a Court of Justice. The *English* export thither Leather, Woollen and Linen Cloth, &c. which they change for Furs, Cotton, Tobacco,

bacco, and other Things which the Savages bring to them.

Its Rivers are the *Kibinequi*, and *Sacatoi*. Ships must avoid with Care the dangerous Passage of *Malabarre*, which is towards the Coasts.

NEW-YORK, is at the South by West of *New England*, and Eastward of the *Iroquois*.

The Country is very agreeable, and very fertile in Corn, Wine, and Fruits.

The City of MANHATTE is the Capital of this Province; it is situated on the River *Del Norte*, and the Governor resides in it. The *Dutch* who possessed it before the *English* rendered themselves Masters of it, in 1665, called it *New Amsterdam*, the *English*, *New York*, and the *Fort of Orange*, *Albany*.

NEW SWEDEN, received its Name from the *Swedes*, who were once Masters of it, but it belongs at present to the *English*. It has nothing particular.

The Capital is CHRISTINA, called once *Andastoe*, where the Governor resides.

VIRGINIA, was the first Country discover'd by *John Verazzan*, who took Possession of it in the Name of *Francis I.* he called it *Mocosa*; but the *English*, to whom it belongs at present, called it *Virginia*, in honour of their Queen *Elizabeth*, who was never married.

It is situated on the River of *Canada*, and confines Northward with the *Iroquois*; Eastward with the Sea; and Southward with *Florida*, from which it is separated by the Mountains of *Apalache*; Westward with the *Eriachronons*.

The Climate is wholesome, and the Soil very fertile, though ill cultivated, and never meliorated. The Women who take Care of it, content themselves with pulling out the Weeds, and stirring its Surface with Forks, or pointed Sticks, a few Days before they sow it. It produces Maiz, Wheat, all Sorts of Pulses, Pitch, Gums, and excellent Tobacco.

Among its Rivers, those of *Tappahanock*, and of *Powhatan*, are the strongest; but the Bay of *Chesapeak* is much more considerable, it being 75 Leagues long, 7 broad, and 10 or 12 at its Entrance.

Note, That there is very little Difference between the native *Virginians*, and the *Canadians*, for their Manners. Each Inhabitant wears on his Back the Mark of his Country.

Note also, That they are govern'd by several Kings, *i. e.* beggarly ones, whom they call *Weroans*, who have each six or eight Cities, but very poor ones, in their Government. The others have but one or two.

The *English* have a General, an Admiral, and particular Governors in each Place. — *Tragabigzanda*, or *Pomejoc*, is accounted the Capital; it is situated on the Coast which looks towards the South by East.

Note again, That the *English* profess their own Religion; but the Natives believe several Gods, whom they call *Kewasarock*, inferior to another great and almighty One, who has always been, whom they call *Kewas*. They have Temples where they make their Offerings to those Gods, sing, and pray for the Dead. They believe the Immortality of the Soul, and that after Death those of the Good go to Heaven, and those of the Wicked into a great Hole, which they call *Popogusso*, and believe to be very far towards the West, to burn for ever.

The Northern Part of CANADA.

The Country of *Laborador*, of *Estotiland*, and *New-Wales*, are the most northern Part, not only of *Canada*, but likewise of all *America*.

The first which is the most Eastern, is called sometimes *New-Britain*, the Country of *Cottereal*, from the Name of the Person who discover'd it. The other, which is more Northward, is taken by some for the first. The last, which is more Westward, is called by the *English* who discover'd it, *New South-Wales*, to distinguish it from another Land more North, separated from the other by the *Christian Sea*, which

they call *New North-Wales*; and which the modern Geographers place among the *Arctic Lands*.

The Climate is extremely cold; and the Soil fertile but in Meadows and Woods. It is traversed with a great Number of Forests and high Mountains. There are seen in it Bears and white Griffins.

Note, That the Natives live on Fish and Game, paint their Face and Body, cloath themselves with Skins of Beasts, and cover their Houses with the same.

Note also, That they are all Idolaters, and we know nothing more particular of them.

A more particular Description of these Countries is as follows:

CANADA, or NEW-FRANCE.

SAGUENAY, contains *Quebeck*, Bishop. *F. Sillery*, *Tadoussac*, *Port-neuf*, *Chicouedec*, *P. S. Nicolas*, *P. Cartier*.

CANADA, contains *Gaspé*, *S. Jean*, *I. Miscou*, *I. F. Richelieu*, *Mont-Real*, *I. S. Simon*, *S. Jude*, *S. Pierre*, *S. Paul*, *S. Francois*, *S. Alexis*, *S. Michel*, *S. Joseph*.

ACADIA, contains *P. Royal*, *Tacquechet*, *P. Roffignol*, *La Heve*, *Paspay*, *Martingo*.

NEW-ENGLAND, contains *Boston*, *London*, *Bristol*, *New-Plymouth*.

NEW-YORK, contains *New-York*, *Albany*.

NEW-SWEDEN, contains *Christina*, *Gottemborg*, *Elfsborg*.

VIRGINIA, contains *Powhatan*, *Pomejack*, *Secotan*.

ISLES OF AMERICA.

Island of NEWFOUNDLAND.

This Island was called once, *Terra de Baccalaos*, because of the great Quantity of Cods found near it.

It is situated at the Entrance of the *Gulph St. Laurent*, under the 49 Deg. of Latitude, and the 326 of Longitude.

It has the Figure of a Triangle, and may have 120 Leagues in its greatest Length from South to North, 100 in its greatest Breadth, and 340 of Circuit.

It is much frequented by the *French*, *English*, and *Dutch*, because of the great Quantity of Cods fished in the Neighbourhood, particularly on the *Great Bank*, which is but 60 Leagues distant from it, towards the South by East, but it is more towards other Places. It has more than 400 Leagues of Circuit, and is for this Reason called the *Great Bank*.

Though this Island has been long discovered, none has penetrated far into the Land, but only stopp'd in its Ports, which are very fine, and in great Number, and where a great Commerce is carried on of Cods and Train Oil.

Between *New France*, and the Island of *Newfoundland*, are found three other pretty large Isles: The first is *Anticosti*, or *Island of Assumption*, situated at the Mouth of the great River, and may have 60 Leagues in Length from South by East to North by West, 10 or 12 in Breadth, and 140 of Circuit. The second is the Island of *Cape Breton*, more Southern than the first, and which is not less in Circuit, though it be less in Length. The last is the Island of *St. John*, situated Southward of *Gaspé*, 30 Leagues long, 16 broad, and 90 of Circuit. Besides these Isles, there are several others much smaller.

In the Sea of *Mexico* are found several Isles depending of *America*, the most considerable of which are the *Antilles*: The others are the *Caribbee*, or of *Barlovento*, *Lucayes*, or of *Sotavento*, which are Dependencies of the Main Land.

ISLES ANTILLES.

It is not difficult to imagine why these Isles have been call'd *Antilles*, or rather *Ant-Isles*; and that is, because they are found first, at least towards *Mexico*, where the *Spanish* Ships at first directed their Course.

Some Authors, as *Cballes* and *Calveto*, give the Name of *Antilles* generally to all the Isles found before one enters the *Gulph of Mexico*. Others, as *Lenchot*, and *Father du Tertre*, called by that Name the Isles of *Cuba*, *Hisp*

Hispaniola, Jamaica, Boriquen, and the *Caribes*; and *Acofta* gives the Name of *Antilles* to the four first only, because they are the most remarkable.

For my Part I am of Opinion, that we may call *Antilles* all the Isles found before one enters the Gulph of *Mexico*, since their Name of *Antilles* or *Ant-Isles*, seems to confirm that Opinion; and not to appear contrary to the Sentiment of the others, I'll distinguish them by their proper Names, and give the Name of *Great Antilles* to *Cuba, Hispaniola, Jamaica*, and *Boriquen*. Those Eastward are called *Canibal*, or *Caribbee*, or *Barlovento*; the others which are Northward are called *Lucayes*; and those Southward, towards the Coasts of the main Land, are distinguished by the Name of *Sotavento*.

The Island *CUBA*, which some *Spaniards* call *Juana*, and *Ferdinanda*, is the greatest of all the *Antilles*.

It is situated between the 20 and 23 Degrees, 30 Min. of Latitude, and extends from the 290 of Longitude, to the 302. It may have 230 Leagues in Length from East to West, 20, 40, or 60 in Breadth, and 550 of Circuit.

The Climate of this Island is not excessively hot, because the great Quantity of Vapours which exhale from the Earth, which is very humid, temperates the Heat of the Sun. The Soil is not very fertile in Corn, but only in Woods, which with its Mountains take up the greatest Part of the Island. It also produces a Quantity of Tobacco, and feeds a vast Number of Cows and Hogs.

It has four principal Cities, among which the *Havanna* is the largest, and most considerable; because it is the Rendezvous of all the Ships which sail from *America*, to return to *Spain*. It is built on the northern Coast of the Island, over-against the Point of *Florida*, and the Governor of the Island resides there.

The City of *St. Jago* is situated in the eastern Part, under the 300 Degree of Longitude: It is an Episcopal See, and was once the Capital of the Island.

Note, That I do not believe there are many of the antient Inhabitants left, after so much Cruelty perpetrated by the *Spaniards* in this Island: But to give some Idea of their antient Manners, I'll relate what *Oviedo* says of those People, *viz.* that they were Lascivious, Cowards, and Treacherous; notwithstanding which, *Peter Martyr* says, that they were very simple.

Note, also, That antiently these People were governed by their *Caciques*, or Captains: At present the *Spaniards* are entire Masters of the whole Country.

Note, again, That the Inhabitants of *Cuba* were like those of all the other *Antilles*, Idolaters, and very superstitious. They had *Boyez*, or Soothsayers, who were likewise their Physicians, and were in fact but meer Charlatans. These Savage Doctors used to teach Children a great Number of Verses, which they learned by heart, and which contained a fabulous Origin of the World, and the heroical Actions of their Ancestors. When a *Boyé* had undertook the Cure of a sick *Cacique*, he used to take through the Nose the Juice of a certain Herb, which rendered him furious, and when he was come from his Trances, he said that he had spoke with the *Cemis*, and that the *Cacique* would soon recover: But if he had said that those Spirits were irritated, he gave thereby to understand, that the Patient should die. They used to represent these *Cemis* very near like our Painters represent the Devil, and said they were Messengers of the eternal God.

The *Spaniards* profess the Catholick Religion, and all the other Inhabitants follow their Example, at least in Appearance; there is, as I have already observed, a Bishop in the City *Havanna*, who is Suffragan of the Bishop of *San Domingo*, in the Island *Hispaniola*.

The Island *HISPANIOLA*, is commonly called Island of *San Domingo*, of the Name of its capital City.

It is situated almost Eastward of *Cuba*, under the 19 Degree of Latitude, and the 305 of Longitude. It has about 150 Leagues in Length from East to West, 30 or 60 in Breadth, and 360 of Circuit.

The Climate is temperate enough, though not very

wholsome; the Soil, which is water'd with several Rivers, is fertile in Maiz and Yuca. The Trees, as Orange-Trees, Lemon-Trees, Fig-Trees, &c. are always green, and in all Seasons bear both Flowers and Fruits: It produces a great Quantity of Sugar and Indigo; feeds a vast Number of Oxen, Cows, and Horses; and abounds with all Sorts of Fowls.

The Capital of this Island is *San Domingo*, situated towards the southern Coast on the River *Ozama*: It is an Archiepiscopal See; has the most antient sovereign Court of all *America*, and a Mint: It has also a College, and an Hospital.

Note, That the Natives of this Island were very little different from those of *Cuba*; they had, like them, a grey Skin, black Hairs, and went quite naked. When some of their *Caciques*, or Captains died, they used to bury with him several Women alive, to go to serve him in the other World.

Note, also, That the King of *Spain* is Master of the greatest Part of this Island, and keeps in it a Governor or General, whose Power extends over all the *Antilles* which are of the Dependencies of *Spain*.

The *French* have several Habitations on the Coast, particularly *Cape François, Port de Paix, Leogane*, &c. which have each their particular Governor; that of *Leogane* being General of all that Part of the Island which belongs to *France*.

Note, again, That the antient Inhabitants were Idolaters, like those of *Cuba*; at present there is no other Religion throughout all *Hispaniola* but the Catholick.

JAMAICA, is situated Southward of *Cuba*, under the 18 Degree, 30 Min. of Latitude, and the 298 of Longitude. It may have 45 Leagues in Length, 20 in Breadth, and 110 of Circuit, without reckoning what's round its two small Gulphs.

The Climate is very different from that of *Hispaniola*, but it is much more unwholsome; and the Product of the Soil is the same.

The *Spaniards* possessed this Island from the Year 1493 to 1655, in which they were expelled by the *English*, under the Conduct of Admiral *Pen*.

The Island, which the Savages call *Boriquen*, is call'd by the *Spaniards*, the Island of *S. Johan* of *Porto Rico*, of the Name of its capital City.

It is situated Eastward of *Hispaniola*, about the 305 Degree of Longitude; and may have 45 or 50 Leagues in its greatest Length, 20 or 25 in Breadth, and 130 of Circuit.

The Climate is very temperate; and the Soil abounds in Maiz, Yuca, Gayac, and Sugar.

The Capital of this Island is *S. Juan de Porto Rico*, situated on the northern Coast: It is honour'd with an Episcopal See, and the Residence of the Governor.

Note, That the antient Inhabitants were very little different from those of the Island *Hispaniola*: It is said, that the *Spaniards* have massacred 600,000 of them; and that, at present, there is not the least Trace of them left.

Note, also, That this Island is in the Power of the King of *Spain*, who keeps a Governor in it; and that all the Inhabitants are *Catholicks*.

ISLES CARIBBEE.

These Isles are call'd *Caribbee*, or *Canibal*, of the Name of the Natives, and *Barlovento* by the *Spaniards*, because they leave them Windward, when they sail towards *Mexico*, or the Main Land.

They are situated between the 310 and 318 Degree of Longitude; and extend from the 12 to the 19 Degree of Latitude.

The Climate is a little hotter than in the great *Antilles*: The Soil is not so fertile, tho' it produces a pretty good Quantity of Maiz, Yuca, Indigo, Sugar, Tobacco, Cotton, and several Roots, and Fruits, as Manyoc, Potatoes, Ananas, &c. Snow, Hail, and Ice, are never seen in them, but they are subject to violent Hurricanes, and Earthquakes.

Note, That the Natives of these Isles are tractable enough, and very credulous. They desired nothing more but to live in Peace and Amity with some *Europeans*, who had retreated thither for various Subjects, and on various Occasions. They lived thus together in good Intelligence, till the first Descent of M. *Enambouc* in 1625; but ever since that Time their *Boyez*, or Soothsayers, having persuaded them in a *Vin*, or general Assembly, that those Foreigners came to invade their Country, and exterminate them, they formed a Resolution to dispatch them all. The *French* and *English* being informed of their cruel Design by a Savages, called *Barbara*, were before-hand with them, and made a cruel Slaughter of them. The *Caribees* of the other Isles having been informed of it, came to the Succour of their Neighbours to the Number of 3 or 4000 Men, in several *Pirogues*, as they call their Boats; but notwithstanding the thick Hail of their Arrows, the *French* and *English* joined together, repulsed them with so much Vigour, that it was believed half of them were killed on the Spot. The *French* lost 100 Men in that Encounter, who had been wounded with poisoned Arrows. The Poison those Arrows had been rubbed with was so violent, that the least Scratch made a Man die furious in four Hours Time.

These Isles are at present inhabited with different Nations of *Europe*; and a vast Number of Negroes they have for Slaves: The most considerable, and the greatest, as the *Guadaloupa*, *Martinico*, Part of *St. Christophers*, *St. Croix*, *St. Bartholomew*, *Santa Lucia*, &c. are inhabited by the *French*; and the *English* inhabit *Antegoa*, *Nevis*, *Montserrat*, and Part of *St. Christophers*.

Note, also, That these People have each their Governors, and Courts of Judicature: The rest of the Savages, who inhabited these Isles, retreated into those of *St. Vincent*, and *Dominico*, towards the Year 1660; in which a general Peace was concluded between them and the *Europeans*.

Note, again, That the *Catholic* Religion is professed in all the Isles inhabited by the *French*, and most of the Savages shew a great Disposition to receive the *Christian* Religion; but however there are yet some of them Idolaters, who suffer themselves to be seduced by their *Boyez*, who are their Priests or Doctors: The *English* profess the *Protestant* Religion.

The Island, which the *Caribees* call'd *Carukera*, was by the *Spaniards* call'd *Guadaloupa*, because its Mountains resemble those of *N. D. of Guadaloupa* in *Spain*.

It is situated under the 16 Degree, 10 Min. of Latitude, and the 315, 40 Min. of Longitude. It is the greatest and most considerable of the *Caribee* Isles, since it may have very near 100 Leagues of Circuit: But it must be observed, that it is divided into two Isles almost equal, by a Channel or small Arm of the Sea, called the *Salt River*, which cuts an Isthmus very near a League and a half broad, which, without this River, would join the two Parts of the Island.

The greatest Extent of these two Parts, is that which is commonly called the *Main Land*. It may have 50 Leagues of Circuit, but either because the *French* have found the Soil sterile, or for some other Reasons, they were a long while before they would cultivate it.

The other Part, which is South by West of it, may have 45 Leagues of Circuit; and its Soil produces *Man-yoc*, *Yuca*, *Sugar*, *Indigo*, *Cotton*, *Potatoes*, *Bananas*, *Ananas*, and other particular Fruits. The Middle of the Island is full of high Mountains, where there are found boiling Fountains of medicinal Waters, of very great Efficacy.

The Island called by the *French* *Martinique*, was called by the Savages *Madanina*.

It is situated under the 14 Degree, 50 Min. of Latitude; and the 316 20 Min. of Longitude. It may have 16 or 18 Leagues in Length, from South by East to North by West; and 45 or 50 of Circuit.

The Climate is hotter than at the *Guadaloupa*, and the

Soil though very dry and gravelly, is more fertile in *Tobacco*, and *Manyoc*. It produces *Sugar*, *Cassia*, *Cotton*, *Potatoes*, *Bananas*, *Indian Figs*, and other Fruits, particular to those Isles. It is the best fortified and most trading of all the *Caribbee* Isles, and produces the best *Sugar*.

The capital City is *Fort Royal*, where the Governor resides.

Note, That none but the *Catholic* Religion is professed in this Island, where there are several Churches.

The Island of *S. Christopher*, which the *Caribees* called *Liamiga*, has received its Name from *Christopher Columbus*, a *Geneose*, who discovered it in his first Voyage to *America*.

It is situated under the 17 Deg. 38 Min. of Latitude, and the 314, 53 Min. of Longitude; and may have 9 Leagues in Length from South by East, to North by West, and 20 of Circuit.

The Climate is more temperate than in the two other Isles above-mentioned, but the Soil is not more fertile. It produces *Sugar*, *Manyacs*, *Potatoes*, and other Fruits and Roots necessary for Food. The Middle of this Island is uninhabitable, because of the great Number of steep Mountains, and the frightful Precipices which part those Mountains from one another. Springs of hot Waters are found in them; and also Mines of *Alum* and *Sulphur*. This Island is very subject to *Hurricanes*.

This Island was once divided between the *French* and *English*, but I believe, if I am not mistaken, that the latter are at present entirely Masters of it.

The Island of *S. Croix*, called by the Savages *Ay-ay*, is situated under the 18 Deg. of Latitude, at South by East of *Boriquen*.

It may have 20 Leagues in Length, 6 or 7 in Breadth, and 50 of Circuit.

The Soil is excellent, and it produces *Sugar*, *Tobacco*, and *Indigo* in Abundance. It feeds Cattle, as Horses, Oxen, Cows, and Sheep. It has a great Number of Rivers, but because this Island is not rais'd towards the Middle like the other Isles, these Rivers for Want of Declivity, form Ponds towards their Mouth which abound with Fish; but whose Waters being stagnated at certain Times, exhale stinking Vapours, which render the Climate unwholesome, and the Inhabitants subject to frequent Maladies. It has three very commodious Ports, and the finest of all the *Antilles*; and is inhabited by the *French*, who all profess the *Catholic* Religion.

The Island called *Barbadoes*, by the *English*, is the most considerable of the *Caribbee* Isles.

It is situated under the 17 Deg. of Latitude, and has above 40 Leagues of Circuit.

Its Soil produces all that's found in the other Isles, especially a great Quantity of *Sugar*. It feeds Abundance of Oxen, Sheep, and Fowls. It has no Rivers, but let the Soil be ever so little dug up, there is found very good Water.

This Island has a very handsome City, full of fine Houses, well built of Stones and Bricks; whose Inhabitants are almost all Merchants, and have Shops very well stock'd with all Sorts of *European* Commodities. They are also well instructed in the military Art.

There are seen in it several large Boroughs, several Forts on the Coasts, and fine Country Houses.

Note, That this Island is inhabited by the *English*, and his *Britannick* Majesty keeps a Governor in it. They all profess the *Protestant* Religion.

Note also, That the other Isles have nothing particular, therefore I'll content myself with marking their Names in my particular Description, according to the Order they keep in their Situation, in descending from North to South; and with the initial Letters of the Names of the People who inhabit them.

ISLES LUCAYOS.

The Isles which the *Spaniards* call *Lucayos*, are those found Northward of the great *Antilles*, between the 29th, and the 30th Deg. of Longitude; and the 21 and 28 of Latitude.

The Climate of these Isles is much more temperate than that of the other *Antilles*; and the Soil produces a great Quantity of Maiz and Fruits. They are frequented by so great a Number of Pigeons, and other Fowls, that sometimes small Vessels are loaded with them, to be exported to the other *Antilles*.

Note, That the Inhabitants of these Isles were not at all cruel, but they were all Idolaters, like their Neighbours.

ISLES DE SOTAVENTO.

At the North by East of the Provinces of *Venezuela*, and *Paria*, in the Main Land, are found the Isles called by the *Spaniards* the *Sotavento*, because they leave them on the Left, when they sail for the Province of *Mexico*.

They are situated between the 9 Deg. 30 Min. and the 12, 30 Min. of Latitude.

The most considerable of these Isles, are the *Trinidad*, and *Margarita*. The first has very near 100 Leagues of Circuit, and the other about 40.

The Climate is pretty hot, and the Soil very humid: The greatest Riches of these Islands is the Fishery of Pearls on their Coasts. The ancient Inhabitants used to make Necklaces, Bracelets, and Garters of those Pearls. The *Spaniards* reap a considerable Profit from them; and when their Enemies can take one of the Ships that comes from the Pearl-Fishery, it is the best Prize they can make.

Note, That these Isles are in the Power of the *Spaniards*, where are seen several Merchants of that Nation, who keep each 40 or 50 Negroe Slaves, more or less, for the Pearl-Fishery. Those Slaves are the happiest of all those whose Fate is common with theirs; for far from being maltreated, their Masters feed them well, that they may be vigilant, and faithful in their Employment, or Occupation.

ISLAND OF CALIFORNIA.

Westward of *New Mexico* is found, in the *South-Sea*, one of the greatest Isles of the World, called *California*, which was thought, for a very considerable Time, join'd to the Main Land.

This Island is situated between the 23 and 46 Deg. of Latitude, separated from *New Mexico*, by the *Varmeille Sea*; so that it is supposed to have more than 450 Leagues in its greatest Length from South to North; 150 in its greatest Breadth, and about 1100 of Circuit.

The Climate is very wholesome, but cold with regard to its Situation. It is not known whether it be fertile or not, because Travellers have gone no farther than its Coasts; but it is imagined that its Temperature must be very little different from that of *New Mexico*.

We are also as little acquainted with the Manners of its Inhabitants, their Government, and Religion.

Along the Coasts are found some Isles, as *St. Clement*, *Pararos*, *Ceintas*, and several others.

A more particular Description of all these Isles, is as follows:

ISLES ANTILLES.

CUBA, Spanish, contains *Havanna*, *P. del Principe*, *S. Jago*, *Manzanilla*, *Spiritu Santo*.

HISPANIOLA, Spanish and French, contains *St. Domingo*, Arch. *S. Jago*, *Yaquimo*, *Cape François*, *Leogana*, *Port de Paix*, &c.

JAMAICA, English.

BORIQUEN, Spanish, contains *San Juan de Porto Rico*, Bishop. *Arrecibo*.

The *ISLES LUCAYOS*, are *Leccayoneque*, *Babama*, *Abacoa*, *Ciguatao*, *Guanabami*, *Cotoniere*, *Samana*, *Jumata*, *Majaguana*.

CARIBBEE ISLES, *St. Croix*, French, *Las Virgines*, *Anguella*, French, *St. Martin*, French, *St. Bartholomew*,

French, *Barbadoes*, English, *S. Christopher*, English, *Antegua*, English, *Guadalupa*, French, *Marie Galande*, French, *Santa Lucia*, French, *Desceada*, French, *Dominique*, *Martinico*, French, *St. Vincent*, *Grenada*, French, *Tabago*, Dutch.

ISLES SOTAVENTO, *Trinidad*, Spanish, *Margarita*, Spanish, *Bianco*, *Tortuga*, *Urchilla*, *Rocca*, *Bon-Ayre*, *Curacao*, Dutch, *Oruba*.

ARCTICK LANDS.

These Lands are call'd *Arctick*, because of the Pole of the same Name, round which they are situated. They make the northern Part of the World, which I have call'd *Polar*, or unknown.

They are almost all situated in the Frigid Zone, except a very small Portion of it which is in the Temperate: Their Extent is very irregular; which is the Reason why we can say nothing certain of it.

They confine, in our superior Hemisphere, with the *Glacial Sea*, which separates them from *Muscovy*, and *Tartary*; and in the other Part with the *South Sea*, and Part with the *Christian Sea*, and the Streight of *Hudson*, which parts them from *America*.

Iceland, *Greenland*, *Spitzberg*, *Nova Zembla*, the *Land of Zeffo*, *New Denmark*, *New North Wales*, the Isles of *Cumberland*, and several others, are reckon'd among the *Arctick Lands*.

The Climate is extremely cold, because the Sun does not appear in several Places during Part of the Year; and, when it appears, its Rays, which fall but very obliquely, are not capable to melt the Ice, which is hard and strong; and therefore continues during almost the whole Year. There are very large Meadows, where the Inhabitants feed a great Number of Cattle; but the Soil produces neither Corn nor Wine.

ICELAND.

This Island is taken by some for the *Thule* of the Antients, tho' with very little Appearance, since *Procopius* says, that *Thule* contain'd thirteen Kingdoms: It is called *Iceland*, because of the excessive Cold which reigns there.

It is situated under our first Meridian, and the Arctick Circle; and may have 150 Leagues in Length, 65 in Breadth, and 400 of Circuit; without reckoning what is round its Gulphs.

The Climate, as I have already observed, is extremely cold, but very wholesome. The Soil abounds with large Meadows; where the Inhabitants feed Oxen and Cows, which furnish them with Leather, Tallow, and Butter, which they change for other Commodities. Whales are fished on the Coasts, and so great a Quantity of other Fish, that they dry Part of it; and when they want Hay, give it to their Cattle. The large Flakes of Ice which come from more northern Countries, bring them Wood, and several Animals, which prove very useful to them; therefore they prefer the Coasts to the Inland Country, which is full of Mountains, and very sterile, because of the continual Snow, for their Habitation. It has three very high Mountains always covered with Snow, which throw up Flames. That called *Hecla* is the most remarkable; at the Foot whereof there are several Mines of Sulphur.

There are but two Boroughs, or Villages, *Hola* and *Scalholt*, the Houses whereof are made of Wood, and covered with the Bark of Trees, or with Skins of Beasts. They have other Habitations on the Coasts, and along the Rivers, where they transport their Houses as they please. The Neighbourhoods of the Harbours of *Haneford*, and *Keplawick*, are very well inhabited, because of the Ships from *Denmark*, *Hambourg*, *Lubeck*, and *England*, which come to trade with the Inhabitants, who give to those Nations in Exchange for their Goods, Leather, Tallow, Butter, Fish Oil, and dry Fish.

Note, That the *Icelanders* are strong, and very little subject to Maladies, they live a long while, and never make use of Physicians. They are clothed with Skins of Beasts.

Note,

Note, also, That the King of *Denmark*, who is Master of this Island, keeps ordinarily two Governors there, one in the Borough of *Hola*, and the other at *Scalbolt*; one for the northern, and the other for the southern Part.

Note, again, That the *Icelanders* are *Lutherans*, and that there are two Bishops, one at *Hola*, and the other at *Scalbolt*, who are commonly Governors of those two Boroughs.

GREENLAND.

This Country is call'd *Greenland*, because of the Moss which is along its Shoar.

Our Maps place it Northward of *Iceland*, but nothing certain can be said of its Extent.

The Climate is so excessively cold, that the *Danes*, who had been sent to settle there, died of it: The Soil produces nothing but Pasture and Moss.

Note, That the Natives eat Bread made of the Bones of Fish, and drink Sea-Water, without being in the least disorder'd thereby: Their Cloaths are made of Skins of Beasts, and of Birds with the Feathers. Ships are sent thither from several Places for the Whale Fishery.

Note, also, That the Borough of *Bearford* was once the Residence of a Governor for the King of *Denmark*, who keeps Part of the Coasts.

SPITZBERG.

This Land, which is the most Northern of the *Arcticks*, was thus call'd from the Name of *Spitzberg*, a *Dutch* Captain who discover'd it; or because of the great Number of its sharp Mountains.

It is situated Northward of *Laponia*, under the 60 Degree of Longitude, and the 78 of Latitude; but we know nothing of its Extent: Some make an Island of it, equally distant from the Pole, and from the Polar Circle.

The Climate is so cold, that those sent thither have had the same Fate of those of *Greenland*: The Soil produces nothing, at least in the Neighbourhood of the Coasts, for we do not know yet the inland Country; no Body daring to venture far from the Shore, for Fear of the great Quantity of large white Bears found in it, by which Part of those sent thither have been devoured.

Note, That the *English* and *Dutch* dispute with one another the Domination of that Country; they fish Whales on the Coast, among which there are some 200 Feet long, and give 120 Tons of Oil.

NOVA ZEMBLA.

This Land, which is the *Carambice* of the Antients, was called *Nova Zembla* by the *Dutch*, ever since they search'd a Passage through it to the *East-Indies*.

It is situated Northward of *Muscovy*, from which it is separated by the *Streight of Weigatz*, or *Nassau*, through which, it was imagined, that the Sea of *Muscovy* had a Communication with that of *Tartary*; but it has been discover'd since, that it is nothing but a Gulph; therefore the *Dutch*, who enter'd it, were forced to return back, because of the Ice. It was said afterwards, that in a second Attempt they had penetrated farther, and found a Passage above *Nova Zembla*, about the 80 Deg. of Latitude, to go to the *East-Indies*, and to *Japan*, but that they kept it secret for several Reasons; which is nothing else but a mere Romance.

LAND of Jesso.

We scarcely know any Thing of this Country but the Name, though it be of a vast Extent: Our Relations speak but of its Coasts, found about the 42 Degree of Latitude, and which is the most known.

It is situated between *Asia* and *America*; Eastward of the first, and Westward of the other.

It seems to me, as if it was separated from those two Regions, by two great Arms of Sea; and some have imagined, that through its *Streight* the Sea of *China* had Communication with the *Northern Ocean*; but others pretend, that there is an *Isthmus* which parts them.

We know nothing particular of its Quality, but I

suppose it to be of the same Temperature with *Canada*; and that the Soil abounds with Pasture.

Note, That the Inhabitants of these Coasts live on Fish, and Game; and clothe themselves with Skins of Beasts: They carry on a Commerce with the *Japonesse*, of Fish, Skins, Tongues, and Fat of Whales.

Note, also, That Part of this Country acknowledges the King of *Japan*; and the Governor, who resides in the City of *Matzumay*, carries him, every Year, Silver, Feathers of various Colours, and Furs.

I know nothing particular of *New-Denmark*, of *New North-Wales*, nor of the Isles of *Cumberland*, &c. but their Names, and little of their Coasts; therefore I'll say nothing else of those Countries, but that they are situated Northward of *America*, in the *Christian*, or *Hudson* Sea.

TERRA AUSTRALIS.

This Part of the Earth may be very well call'd *Unknown World*, because we know but the smallest Part of it: It is also call'd *Magellanick Land*, because *Magellan* was the first *European* who discover'd it.

It is situated round the *Antarctick Pole*; advancing, in an irregular Manner, into the Temperate Zone; and even as far as the Equator, in some Places.

The Climate is various, according to its different Situation; but generally the Soil is very fertile: Towards the Coasts it is very fat, and produces several Sorts of Spices, as Pepper, Ginger, Nutmegs, and others: Fruits, as Lemons, Apples, Walnuts, Cocoa-Nuts, Ubes, which are a Sort of Pears, and Sugar-Canes in great Quantity. It produces likewise Beans, and large Roots, which, when baked, serve instead of Bread: It has Mines of Gold, and Silver, and Quarries of Marble: The Earth is very proper in several Places to make Bricks withal: Pearls are fished on the Coasts, and several Sorts of Fish: It feeds wild and domestick Animals, such as we have in *Europe*, as well as others unknown to us.

Fernandez Quir, a *Spaniard*, *John More*, *Le Mair*, and *Schouten*, a *Dutchman*, have observ'd in it several Mouths of Rivers, but they have not enter'd them; only contenting themselves with anchoring in some Gulphs, and Harbours, which they found very commodious.

Among the *Austral Lands*, are reckon'd the *Main Land*, commonly call'd *Unknown*; the *Terra del Fuego*, which is a great Island, situated between that large Continent and the *Streight of Magellan*; the *New Guinea*, situated under the 5 Degree of southern Latitude, and between the 181 and the 205 of Longitude; and the *Isles of Solomon*, which are Eastward of it, towards the 215 Degree.

Several Places of the *Unknown Land*, are distinguish'd by different Names, as the *Land of Quir*, the *Land of the Parrots*, the Countries of *Beach*, *Locach*, *Maletur*, the Country of *Concordia*, of *Diemens*, &c.

Note, That among the different Inhabitants of this unknown World, some are white, some tawny, and others black, according to the different Climates. For Example: In *New Guinea*, which is in the *Torrid Zone*, they are all very black: Towards *Terra del Fuego*, they are white, and very tall. All these People are of a good Constitution, seldom sick, and live without Care; notwithstanding which, they hate Idleness, and apply themselves to make Cloths, Stuffs, Instruments, and some Works of Marble: Those who are a little further in the Temperate Zone, clothe themselves with Skins of Beasts; others are cover'd only from the Waist to the Knees, and lay on Mats made of Reeds.

Note, also, That it is pretended there are neither Kings, nor Princes, in that vast Country; and that those People are only divided into several Factions; which I can scarcely believe. Some Authors pretend, that they chuse Governors, to oblige the Lazy to work, to chastise the Wicked, and for the Administration of Justice; and that they meet from Time to Time for the publick Good.

Note,

Note, again, That they are all Idolaters, and have Oratories for the Worship of their Idols: They observe certain Fasts, and wash their Bodies at certain Days of the Year. It is said that the *Portuguese* have settled there the Catholick Faith, have erected Crosses, and built Churches, but we do not know in what Part of the Country.

We must have made throughout this Treatise of *Geography* the following curious Remarks, to help our Memory.

1. That our *Continent* is divided, by the Sea, into three very great *Peninsula's*, viz. *Asia*, *Africa*, and *Europe*: And that the other *Continent* is likewise divided into two very great ones, viz. the *Northern America*, and *Southern America*: That there are, therefore, five very great *Peninsula's*, which make, each, one of the five Parts of the two known *Continents*, i. e. that the three Parts of our *Continent*, and the two Parts of the other, make each separately a very great *Peninsula*. That the *Peninsula's* which make Portions of these very great ones, are also of two Sorts, great and middling.

ASIA, has four great *Peninsula's*, which are, *Lesser Asia*, *Arabia*, and the two *Peninsula's* of the *Indies*, beyond and this Side *Ganges*; and three middling, viz. the *Peninsula* of *Guzarata*, on the Coast of *Mogul*; that of *Malaca*, which make Part of that of the *Indies* beyond *Ganges*, and the *Peninsula* of *Corea*, on the Coasts of *China*.

Note, That in these *Peninsula's*, and other Parts of *Asia*, there are four whole Empires, and Parts of two others; thirty-one principal Kingdoms; and three Dominations established by the *Europeans*. The whole Empires are *Persia*, *Mogulistan*, *China*, and *Japan*: The two others, which are contain'd in it but in Part, are *Turky* and *Muscovy*. The thirty-one principal Kingdoms are, (viz. twenty-four on the Main Land) *Mecha*, and *Fartash*, in *Arabia*: *Visapour*, *Golcond*, *Calicut*, and *Cochin*, in the *Peninsula* of the *Indies*, this Side *Ganges*: *Siam*, *Camboya*, *Ava* or *Pegu*, *Arracan*, *Acham*, *Tonquin*, *Cochinchina*, and of the *Laves*, in the *Peninsula* of the *Indies* beyond *Ganges*: *Barantola*, or *Lassa*, *Necbal*, *Tanju*, *Cogue* or *great Thibet*, *little Thibet*, *Kasghar*, *Samarkand*, and *Balsh* in *Great Tartary*: *Odiesschi*, *Imereti*, in *Georgia*: And seven in the Isles, viz. of the Isles *Maldiva*, of *Candia*, in the Island *Ceylon*; *Achem*, *Materan*, and *Borneo*, in the Isles of the *Sond*; *Macassar*, and *Tarnate*, in the *Molucca's*. The three Dominations established by the *Europeans*, are of the *Spaniards*, in the *Philippine Isles*; of the *Portuguese*, at *Goa*, and on several Coasts of the *Indies*; and of the *United Provinces* at *Batavia*, in the Island *Java*, and on several Coasts of the *Indies*.

2. That *AFRICA* appears as if it was composed of two great *Peninsula's*, viz. *Africa* or *Lybia*, and *Ethiopia*; and has but a middling one, which is the Coast of *Ajan*.

Note, That we must have observed, that *Africa* has several States; the most considerable whereof are about twenty-seven; among which are four whole Empires, and part of another; sixteen principal Kingdoms, one Republick, and five Dominations established by the *Europeans*. The four whole Empires are *Abyssinia*, *Tombut*, *Monomotapa*, *Monomotapi*: The Empire, which is but in Part in it, is *Turky*. The sixteen more considerable Kingdoms are *Morocco*, and *Fex*, in *Barbary*; *Tafilet*, in the *Biledulgerid*; *Gaoga*, and *Borno*, in the *Zaara* or *Desart*; *Gangara*, and *Soufos*, in the *Negroes*; *Benin*, and *Ardea*, in *Guinea*; *Macoko*, *Mujac*, *Congo*, *Loanga*, *Angola*, in what we call *Congo*. The Republick is *Brava*, on the Coast of *Zanguebar*. The five Dominations established by the *Europeans*, are of the *French* at *Madagascar*; of the *Spaniards*, on the Coast of *Barbary*, and in the *Canary Isles*; of the *Portuguese*, on the Coast of *Barbary*, and of *Zanguebar*; and in the Isles *Madeira*, and of *Cape Verd*; of the *Dutch*, on the Coasts of *Guinea*, *Congo*, and of the *Cafres*, &c.

3. *EUROPE*, has four great *Peninsula's*, and four middling ones. The four great are *Scandinavia*, *Spain*, *Italy*, and *Turky* in *Europe*: The four Middling, are *Jutland* in *Denmark*, *Britanny* in *France*, *Morea*, which make Part of that of *Turky* in *Europe*; and the *Peninsula* of *Precep*, or of *Crim*, which make Part of the *Little Tartary*.

Note, That we have already mention'd all the different Empires, Kingdoms, and States, contained in that Part of our *Continent*.

4. *NORTHERN AMERICA*, has a great *Peninsula*, and three middling ones. The great is *New South-Wales*: The three middling are *Jucatan* in *New Spain*, *Florida*, *Acadia* in *New France*.

SOUTHERN AMERICA, has neither great nor middling *Peninsula's*.

5. That the *Land of Concordia*, in the *Magellanick* *Continent*, and *Greenland*, in the *Northern* *Continent*, or *Arctick* Lands, seem to make *Peninsula's*.

Note, That *America* had antiently two Empires, viz. *Mexico*, in the *Northern*; and *Peru*, in the *Southern*: But at present there are three Sorts of States in *America*, viz. several petty Kingdoms, several free People, and five foreign Dominations, establish'd by so many States of *Europe*.

Among the petty Kingdoms, the best policy'd are those of *Florida*; of which those of *Apalache*, *Coza*, *Cofachiqui*, and of *Quiquiltangui*, seem the most considerable.

Among the People who have no Kings, are the *Iroquois*, the *Kilistinous*, the *Affinipoualac*, the *Nadouessi*, and the *Illinois* in *Canada*; the *Caribbees*, in the Isles of the same Name, and in *Guiana*; the *Tapuces*, in the *Brasil*; and the *Araucques*, in *Chili*, &c.

The foreign Dominations, established by the *Europeans*, are, The *French*, establish'd in *New France*, in several *Caribbee Isles*, and on the Coast of *Guiana*. The *Spanish*, establish'd in *New Spain*, *New Granada*, *Peru*, *Chili*, the *Tucuman*, which makes Part of the *Paraguay*, and the greatest of the *Antilles*. The *Portuguese*, established on the Coast of *Brasil*; to which may be added the Isles *Tercere*, between *America* and *Europe*. The *English*, established in *New England*, *Virginia*, on the Coasts of *Canada*, *Carolina*, in *Florida*, and in several of the *Antilles*. The *Dutch*, established in several of the *Caribbees*, and on the Coast of *Guiana*.

6. That the *Peninsula's* heretofore are almost all joined by narrow Slits of Land call'd *Isthmus's*, which are either broad, or very narrow.

The broad ones are distinguished by no Names; such are almost all those which join most of the *Peninsula's* abovemention'd.

The most considerable among the narrow ones are five in Number; the two most famous whereof are: The *Isthmus* of *Sues*, in our *Continent*, which join *Asia* and *Africa* together: And the *Isthmus* of *Panama*, in the other *Continent*, which join the two *America's*. The three others are, The *Isthmus* of *Corinth*, which joins the *Morea* with *Turky* in *Europe*. The golden *Isthmus*, or of *Precep*, which joins the *Peninsula* of *Crim* with *Little Tartary*. And the *Isthmus* of *Tanasserin*, which joins the *Peninsula* of *Malaca*, with the *Peninsula* of the *Indies* beyond *Ganges*.

7. That these *Continents*, and Isles, heretofore mentioned, are environed or bathed by the Sea; which Sea is either call'd *Ocean*, as that which environs our *Continent*, or *Sea* only, as that which bathes the other *Continent*.

Note, That the *Ocean* is divided into four great Parts, viz. *Oriental*, *Meridional*, *Occidental*, and *Septentrional*: These Names being borrow'd from the Regions of the Heavens towards which those Parts of the *Ocean* are situated with regard to our *Continent*. The *Indians*, *Ethiopiens*, *Celts*, and *Scythians*, having been antiently the most famous People of our *Continent*, of which the *Indians* have occupied the most eastern Part;

Part; the *Ethiopians*, the most Southern; the *Celtes*, the most Western; and the *Scythians* the most Northern: The Eastern Ocean is called *Indian*; the Southern, *Ethiopian*; the Western, *Celtick*; and the Northern, *Scythian*. The Western, or *Celtick* Ocean, is most commonly called *Atlantick*, from Mount *Atlas*, which that Sea bathes; and the Northern, or *Scythian*, is often called *Glacial*, because almost always frozen.

The Eastern, or Oriental Ocean, bathes the Eastern, and Southern Coasts of *Asia*; the Southern, or *Ethiopian*, embraces the Coasts of *Ethiopia*; the Western, or *Atlantick*, extends along the Western Coasts of *Africa*, and *Europe*; and the Northern, *Glacial*, or *Scythian*, washes the Northern Coasts of *Europe*, and *Asia*.

Note also, That the four great Parts of the Ocean are subdivided into several lesser, called *Seas*, and which borrow their particular Name from the Lands or Regions they bathe. — The *Eastern*, or *Indian Ocean*, is subdivided into *Sea of China*, *Sea of the Indies*, and *Sea of Arabia*. The *Southern*, or *Ethiopian Ocean*, embraces the *Seas of Zanguebar*, of *Cafrery*, and of *Congo*. The *Western*, or *Atlantick Ocean*, contains the *Seas of Guinea*, of *Cape Verd*, and of the *Canaries*, which bathes the Coasts of *Africa*; and the *Seas of Spain*, *France*, and of the *British Isles*, along the Coasts of *Europe*. The *Northern*, *Glacial*, or *Scythian Ocean*, contains the *Seas of Denmark*, *Muscovy*, and *Tartary*.

Note again, That we have given the Name of *Sea*, in general to the Waters which bathe *America*, and that *Sea* is divided into three great Parts, viz. the *Northern Sea*, *Southern*, or *Pacifick Sea*, and *Magellanick Sea*.

The *Northern Sea* is subdivided into *Sea of Canada*, or of *New France*, *Sea of Old Mexico*, or *New Spain*; *Northern Sea*, or *Sea of Brasil*.

The *Southern*, or *Pacifick Sea*, contains the *South-Sea*, or of *Peru*, the *Seas of New Mexico*, or *California*, and of *Jesso*.

The *Magellanick Sea*, contains the *Seas of Paraguay*, of *Chili*, and the *Particular Magellanick*.

Between the *Eastern*, or *Indian Ocean*, and the *Southern*, or *Pacifick Sea*, is the *Archipelago of S. Lazare*.

Towards the *Arctic Lands*, is the *Sea of Greenland*, which is often mistaken for the *Glacial Ocean*.

8. Besides these Divisions, and Subdivisions of the Sea into greater and lesser Parts, there are other still lesser Parts of it, called *Gulphs*.

Note, That among the *Gulphs* there are three very famous ones in our Continent, which are called *Sea*, because of their great Extent: And these are, 1. The *Mediterranean*, between *Asia*, *Africa*, and *Europe*, the three Parts of our Continent. 2. The *Red-Sea*, between *Asia*, and *Africa*. 3. The *Baltick*, in *Europe*.

Note also, That the two greatest *Gulphs of America*, are the *Gulphs of Mexico*, between the two *America's* and the *Antilles*: And the *Christian Sea*, between the *Canada* and *Arctic Lands*.

9. Besides these *Gulphs*, there are narrow *Seas*, or *Guts*, shut up between Lands on either Side, and affording a Passage out of one great Sea into another called *Streights*.

Note, That the three most famous *Streights* of the World, are those of *Jesso*, or *Uriez*, of *Magellan*, and of *Hudson*. The first makes the Separation of the

antient Continent from the new; the second parts, in some Measure, the new from the pretended *Magellanick* Continent; and the third is between the new Continent, or *America*, and the *Arctic Lands*.

Besides these three *Streights*, there are three very famous ones in our Continent, viz. the *Streight of Gibraltar*, between *Africa* and *Europe*, and which gives Entrance to the Ocean into the *Mediterranean Sea*: The *Streight of Babelmandel*, between *Asia* and *Africa*, and which makes the Communication of the Ocean with the *Red-Sea*: The *Streight of the Sonde*, which joins the *Baltick* with the Ocean.

There are also three famous *Streights* in *America*, viz. the *Canal of Bahama*, the most famous of the Passages from the Gulph of *Mexico* into the Northern Sea; the *Streight of Anian*, between the Island of *California*, and the Land of *Jesso*; the *Sea of Vermico*, which may pass for a *Streight* between the Island of *California*, and *New Mexico*.

10. The Lands nearer those Seas, or which they bathe, are called *Coasts*.

Note, That the *Coasts* do not extend along the Sea, on a strait Line, but make Advances, or Projections into it, called *Promontories*, or *Capes*. The most famous *Promontories*, or *Capes*, of our Continent are; 1. The *Northern Cape*, towards the North; 2. The *Cape of Good Hope*, Southward; 3. The *Cape Liampo*, Eastward; 4. The *Cape Verd*, Westward. The *Northern Cape*, is on the *Coast of Norway*, and in *Europe*; the *Cape Liampo*, is on the *Coast of China*, and in *Asia*; the *Cape Verd*, and that of *Good Hope*, are in *Africa*; the first on the *Coast of the Negroes*, and between the Branches of the *Niger*; and the last on the *Coasts of Cafrery*. In the other Continent, or *America*, are *Cape Charles*, which is most Northern, and in *Canada*; *Cape Froward*, the most Southern, and in the *Magellanick Land*; *Cape S. Augustin*, the most Eastern, and in *Brasil*; *Cape Corientes*, the most considerable of the Western, and in *New Spain*.

Geography is very antient, at least the special Part thereof; for the antient Writers scarce went beyond the Description of Countries.

It was a Custom among the *Romans*, after they had conquered and subdued any Province, to have a Map, or painted Representation thereof carried in Triumph, and exposed to the View of the Spectators.

Historians relate, that the *Roman Senate*, about a hundred Years before *Christ*, sent Geographers into divers Parts, to make an accurate Survey, and Mensuration of the whole Globe; but they scarce ever saw the twentieth Part thereof.

Before them, *Neco*, King of *Egypt*, ordered the *Phenicians* to make a Survey of the whole *Coast of Africa*, which they accomplished in three Years; *Darius* procured the *Ethiopic Sea*, and the Mouth of the *Indus* to be survey'd; and *Pliny* relates, that *Alexander*, in his Expedition into *Asia*, took two Geographers, *Diognetus* and *Baton*, to measure, and describe the Roads; and that from their Itineraries, the Writers of the following Ages took many Particulars. Indeed this may be observed, that whereas most other Arts are Sufferers by War, *Geography* and *Fortification* alone, are improved thereby.

The Art, however, must needs have been exceedingly defective; as a great Part of the Globe was then unknown; particularly all *America*, the northern Parts of *Europe* and *Asia*, with the *Terra Australis*, and *Magellanica*; and as they were ignorant of the Earth's being capable of being sail'd round, and of the Torrid Zone's being habitable, &c.

G E O M E T R Y.

GEOMETRY, Γεωμετρία (formed of γη, Terra, Earth, and μέτρον, metiri, to measure) is the Science or Doctrine of Extension, or extended Things, that is, of *Lines, Surfaces, and Solids.*

Hence the Division of *Geometry*, into four Parts, viz. *Planimetry, Altimetry, Longimetry, and Stereometry.*

Note, That *Planimetry*, is that Part of *Geometry*, which considers *Lines*, and plain Figures, without any Consideration of Heights or Depths; but it is more particularly restrain'd to the Mensuration of Planes, or Surfaces; in Opposition to *Stereometry*, or the Mensuration of Solids. This Art of measuring the Surfaces or Planes of Things, is performed with the Squares of long Measures, as square Inches, square Feet, square Yards, square Perches, &c. that is, by Squares whose Sides are an Inch, a Foot, a Yard, a Perch, &c. So that the Area, or Centre of any Surface is said to be found, when we know how many such square Inches, Feet, Yards, &c. it contains.

Altimetry, is the Art of taking or measuring Altitudes or Heights, whether accessible or inaccessible. This Art makes the first Part of *Geometry*, including the Doctrine and Practice of measuring both perpendicular and oblique Lines, whether in Respect of Height or Depth.

Longimetry, is the Art of measuring Lengths; both accessible, as Roads, &c. and inaccessible, as Arms of the Sea.

Stereometry teaches how to measure solid Bodies, i. e. to find the Solidity, or solid Content of Bodies; as Globes, Cylinders, Cubes, Vessels, Ships, &c.

GEOMETRY, again, is distinguished into *Theoretical, or Speculative, and Practical.*

The first contemplates the Properties of Continuity; and demonstrates the Truth of general Propositions, called *Theorems.*

The second applies those Speculations and Theorems, to particular Uses in the Solution of *Problems.*

Speculative Geometry, again, may be divided into *Elementary and Sublime.* *Elementary* or *Common Geometry*, is that employ'd in the Consideration of right Lines, and plain Surfaces, and Solids generated therefrom. *Higher* or *Sublime Geometry*, is that employed in the Consideration of Curve Lines, Conick Sections, and Bodies form'd thereof.

I'll begin by the *Speculative Geometry*, and pass afterwards to the practical Part; but we must observe previously to it, that there are three Sorts of Principles from which all *geometrical* Propositions are deduced, viz. the *Definition, Postulate, and Axiom.*

We call *Definition*, the Explication of the Name, or of the Thing, as when somebody says that he understands by the Name of *Triangle*, a Figure composed of three Lines.

A *Postulate*, is a clear, evident Proposition, wherein it is affirmed or denied, that something may or may not be done.

A Thing immediately deduced from the Consideration of one single Definition, if it expresses something to agree, or disagree to another, is called an *Axiom.* If it affirms, that something may or may not be done, it is called a *Postulate.*

Thus, e. gr. from the Genesis of a Circle, it is evident, that all right Lines drawn from the Centre to the Circumference, are equal, since they only represent one and the same Line, in a different Situation: This Proposition therefore is esteemed an *Axiom.*

But since it is evident from the same Definition, that a Circle may be described with any Interval, and from any Point, this is accounted a *Postulate.*

Axioms and *Postulates*, therefore, seem to have nearly the same Relation to each other that *Theorems* and *Problems* have.

An *Axiom*, however, is a self evident Truth, or a

Proposition, whose Truth every Person perceives at first Sight: Thus, that the whole is greater than its Part, is an *Axiom.*

Then of Propositions, some propose something to be done, and are *Problems*; as to divide a Line, to make an Angle, to draw a Circle thro' three Points not in a right Line: Others consider the Properties of Things already made, or done; and are called *Theorems.* Thus if a Triangle be compar'd with a Parallelogram, standing on the same Base, and of the same Altitude, and partly from their immediate Definitions, and partly from other of their Properties already determin'd, it is inferred that the Parallelogram is double the Triangle, that Proposition is a *Theorem.*

Note, That there are two Things to be chiefly regarded in every *Theorem*, viz. the Proposition, and the Demonstration: In the first is expressed what agrees to some certain Things under certain Conditions, and what does not. In the latter, the Reasons are laid down, by which the Understanding comes to conceive, that it does, or does not agree thereto.

Note also, That there are various Kinds of *Theorems*, as *Universal, Particular, Negative, Local, Plane, Solid, Reciprocal.* *Universal Theorem*, is that which extends to any Quantity, without Restriction, universally; as this, *that the Rectangle of the Sum, and Difference of any two Quantities, is equal to the Difference of their Squares.* *Particular Theorem*, is that which extends only to a particular Quantity; as this, *in an equilateral right lined Triangle, each of the Angles is 60 Degrees.* *Negative Theorem*, is that which expresses the Impossibility of any Assertion; as, *that the Sum of two biquadrate Numbers cannot make a square Number.* *Local Theorem*, is that which relates to a Surface; as, *that Triangles of the same Base and Altitude are equal.* *Plane Theorem*, is that which either relates to a rectilinear Surface, or to one terminated by the Circumference of a Circle; as, *that all Angles in the same Segment of a Circle are equal.* *Solid Theorem*, is that which considers a Space terminated by a solid Line; that is, by any of the three conick Sections, e. gr. this, *that if a right Line cut two asymptotick Parabola's, its two Parts terminated by them shall be equal.* *Reciprocal Theorem*, is one whose Converse is true; as, *that if a Triangle has two equal Sides, it must have two equal Angles:* The Converse of which is likewise true, that if it has two equal Angles, it must have two equal Sides.

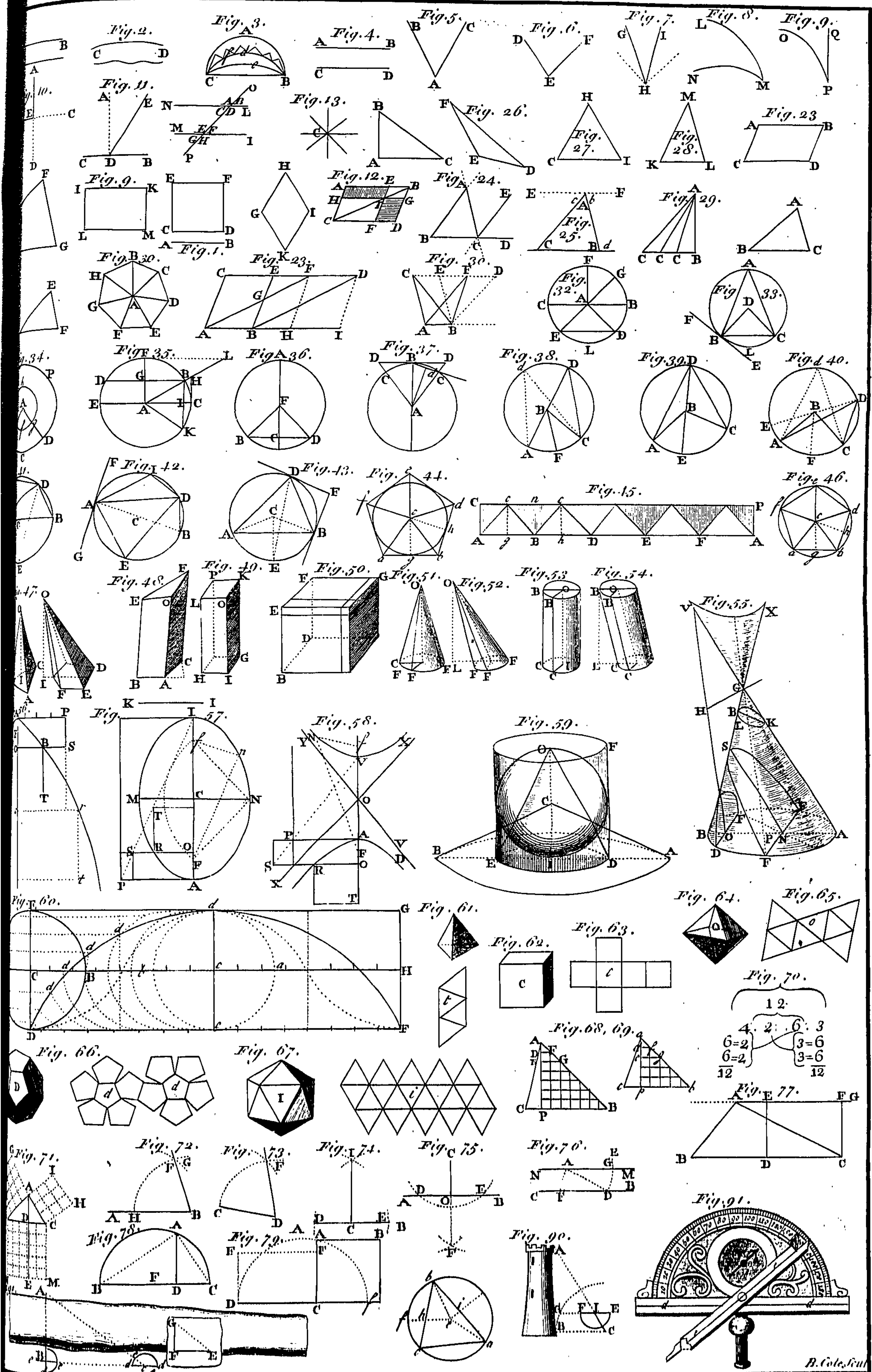
Others, besides, are only laid down in order to clear the Way for some following Demonstration; and prefixed either to Theorems, in order to render their Demonstration less perplexed and intricate; or to Problems, to make their Resolution more easy and short; and these are called *Lemmas.* Thus to prove a Pyramid one Third of a Prism, or Parallelepiped, of the same Base and Height with it; the Demonstration whereof in the ordinary Way is difficult and troublesome: This *Lemma* may be premised, which is proved in the Rules of Progression, *that the Sum of the Series of the Squares, in Numbers in arithmetical Progression, beginning from 0, and going on 1, 4, 9, 16, 25, 36, &c. is always subtriple of the Sum of as many Terms equal to the greatest; or is always one Third of the greatest Term multiplied by the Number of Terms.* Thus to find the Inflection of a curve Line, this *Lemma* is first premised; *that the Tangent may be drawn to the given Curve, in a given Point.*

Lastly, others necessarily follow from others, and are called *Corollaries.*

Scholium, is a Note, Annotation, or Remark, occasionally made on some Proposition, whereby it is better explained, or its Use or Utility made more apparent.

A Proposition is said to be the *Converse* of another, when, after drawing a Conclusion from something first supposed

GEOMETRY.



supposed, we proceed to suppose what had been first concluded, and to draw from it what had been supposed. Thus it is demonstrated in *Geometry*, that if the two Sides of a Triangle be equal, the two Angles opposite to those Sides are equal also: The *Converse* of the Proposition is, *That if the two Angles of a Triangle be equal, the two Sides opposite to those Angles are equal also.*

Note, That this Mark $+$ signifies more; $-$ signifies less; $=$ signifies Equality.

From these general, and necessary Observations, I'll pass to the speculative *Geometry*, beginning by the *Lines* and *Angles*.

MAGNITUDE, is all that whereby a Thing compared with another of the same Kind, is said to be equal, or unequal to it; therefore it comprehends local Extension, Number, Motion and Time: But *Geometers* have a great Regard to the *Local Extension*, because it facilitates the Mensuration of all others.

Local Extension, or Quantity of Bigness, is a certain and definite Sort of Magnitude, viz. what is answered to a Person who asks, how big is such a Thing? and that Quantity is either considered in Length only, and is called *Line*; or in Length and Breadth, and is called *Superficies*; or lastly, in Length, Breadth, and Depth, and is called *Solid*.

The Ends of a Line are called *Points*; and a *Point* in *Geometry*, according to *Euclid*, is a Quantity which has no Parts; or rather it is that which is conceived to have no Parts, though in fact, it has Parts.

Wolfius defines it, that which terminates itself on every side, or which has no Terms or Boundaries distinct from itself.

There are two Kinds of *Lines*, viz. *Right Lines*, and *Curve*.

A *Right Line* is that which is drawn equally between its two Extremities, as A B. fig. 1. For if the Point A moves towards B, by its Motion it describes a *Line*; and this, if the Point goes the nearest Way towards B, will be a right, or strait *Line*, whose Definition therefore should be the nearest or shortest Distance between any two Points, or a *Line* all whose Points tend the same Way.

A *Curve* is a Line whose several Points tend several Ways, or are posited towards different Quarters, as C D, fig. 2.

Superficies likewise, is either plain, and is that which has no Inequality, but lies even between its boundary Lines, as the *Superficies* or *Surface* of a Table of Marble; or is *Curve* like that of a Globe.

If two or several Lines are contained within the same Terms, that which is right, is the shortest, as C B, fig. 3. And the *Curves* which contain the others, are bigger than those they contain, as C d B is greater than C e B, which is only true when those *Curve Lines* are incurvated in the same Part; for if the Line contained is bent in several Parts, and forms several Windings, it may be bigger than that which contains it, as C f B is greater than C A B.

If two Lines are every where equidistant from each other; and though infinitely produced would never approach nearer, or recede farther from each other, they are called *Parallel*, as A B, and C D, fig. 4.

The Aperture, or mutual Inclination of two Lines, which meet in one Point of Intersection, is called *Angle*, as B A C, fig. 5. and in the Point in which the Lines meet is called the *Vertex* of the Angle, as A; therefore every Angle is commonly expressed by three Letters, that of the *Vertex* being in the Middle.

Note, However, that the Quantity of the Angle is not taken from the Length of the Lines which form the Angle, but from the Arch described from its *Vertex*, with any Radius at Pleasure between its Legs. For the Angle D E F, fig. 6. is greater than the Angle G H I, fig. 7. though formed of lesser Lines: For if the Angle G H I be put on the Angle D E F, marked with Points, it will be easily understood, that the Angle G H I is comprized in the Angle D E F, and that the Lines which form the Angle D E F, are

much more distant from each other, than those which form the Angle G H I.

Angles, made by Lines in the Superficies, are call'd *Superficial*; and if that Superficies be *Plane*, they are call'd *Plane Angles*; if Spherical, *Spherical Angles*.

A *Plane Angle*, if made of two right Lines, is call'd *Rectilinear*; such are the Angles of fig. 5, 6, 7. if of *curve*, *Curvilinear Angle*; as L M N, fig. 8. if of a Right, and a Curve, it is call'd *mixt*, as O P Q, fig. 9.

Every *Angle* is either *right*, *obtuse*, or *acute*.

A *Right Angle*, is that formed by a Line falling perpendicularly on another; or that which subtends an Arch of 90 Degrees; as the Angle B E A, fig. 10. The Measure of a *right Angle*, therefore, is a Quadrant of a Circle; and consequently all right Angles are equal to each other.

Therefore, when the right Line A E, fig. 10. placed on the right B E C inclines on neither Part, and then forms Angles every where equal; those two Angles, A E B and A E C, are right; and the right Line A E, placed on the other, is call'd *perpendicular*.

Angles which have one Side common, and are formed of the one and other Part of that Side, are call'd *contiguous Angles*; as fig. 10. A E B and B E D; but if B E be produced in C, as A E is produced in D, the Angles B E A, and D E C, are call'd *opposite Angles*.

An *obtuse Angle*, is that greater than a right Angle, or whose Measure exceeds 90°, as the Angle E D C, fig. 11.

An *acute Angle*, is that which is less than a right Angle, or than 90°; such is, in the same Figure, E D B: We must observe, that there are obtuse Angles, as well as acute ones, bigger than the others.

The Angles of any right-lined Figure made without it, by producing all the Sides severally, are called *external Angles*; and those made by the Sides of any right-lined Figure within, *internal*.

Note, That all the *external Angles* of any Figure, taken together, are equal to four right Angles; and the external Angle of a Triangle, is equal to both the internal and opposite ones. That the Sum of all the *internal Angles* of any right-lined Figure, is equal to twice as many right Angles as the Figure has Sides, excepting four. The external Angle is demonstrated to be equal to the internal opposite one; and the two internal opposite ones, are equal to two right ones.

Alternate Angles, are the internal Angles made by a Line cutting two Parallels, and lying on the opposite Sides of the cutting Line; the one below the first Parallel, and the other above the second.

FIRST THEOREM.

A right Line resting on another right Line, makes again two right Angles, or equal to two Rights.

For if A D, fig. 11. falls perpendicularly on the Line C D B, the Angles A D B, and A D C, will be right Angles, by the Definition 11 and 12; but if E D rests obliquely on the same Line C D B, A D must be conceived the Perpendicular; since, then, the Angles E D B acute, and E D C obtuse, occupy the same Space as the two Rights A D B; and A D C will be equal to them, by the Axiom, *where there is a mutual Congruency, there is an Equality*.

Note, That *Congruency* is when Things composed together agree in such a Manner, that the Extremities of the one fall on the Extremities of the other, and neither exceed, nor are exceeded: As if a *pedal Line*, applied to another pedal Line, the last Points of one should fall on the last Points of the other, and both form a Line.

COROLLARIES.

It will be demonstrated in the same Manner, (if more than one right Line fall on the same right Line, at the same Point) that the Angles they form are, together, equal to two right ones.

Two right Lines, cutting mutually one another, as A E D, and B E C, fig. 10. form, in the Point of Intersection, four Angles equal to four right ones.

All the Angles formed round one Point C, fig. 13. are equal to four right ones; for they are four right ones cut into several Parts.

Second THEOREM.

The Angles, opposite at the Vertex, are equal.

For the Angle B, fig. 12. is equal to the Angle C; which the better to demonstrate, both must be joined with the intermediate Angle A; for the Angle B, and the Angle A, together, are equal to two right Angles, by the first Theorem. Likewise the Angle C, and the Angle A, are equal to two right Angles by the same first Theorem. Therefore the Angles C and A, taken together, are equal to the Angles B and A, taken together; and consequently the common Angle A, being taken off, the Angles B and C will remain equal, by this Axiom, *That if you take Equals off Equals, those that remain will be Equals*; which was to be demonstrated.

Third THEOREM.

If the right Line OP cuts the two right Parallels NL, and MI, it will make the internal Angle equal to the external opposite on the same Part.

For as the Lines LN and MI, fig. 12. are Parallel, they incline equally to the Line OP, towards the same Parts by the sixth Definition, and the 9 Axiom; therefore the Angles B and F, or A and E, formed by the Inclination of the Lines LN, and IM, to the Line OP, are equal.

Fourth THEOREM.

Alternate Angles are equal between themselves.

For the Angle B, fig. 12. is equal to the Angle C, opposite to it at the Vertex, by the second Theorem. But the same Angle B is equal to the Angle F, by the third Theorem; therefore the Angle C is equal to the alternate Angle F, by the second Axiom.

Fifth THEOREM.

If a right Line cuts two Parallels, it makes the internal Angles equal to two Rights at the same Parts.

For the alternate Angles C and F, fig. 12. are equal between them, by the fourth Theorem; but the Angles C and D placed again are equal to two Rights by the first Theorem; therefore the Angles D and F are equal to two Rights, which was to be demonstrated.

SCHOLIUM.

Converse Propositions have Place in the three preceding Theorems; for if the two Lines LN and IM, fig. 12. with the third OP, render the external and internal Angles B and F, opposed on the same Part, equal; they'll incline equally to the Line OP, whence they'll be Parallel by the 9 Axiom.

Likewise, from the alternate Angles C and F being equal, it follows that the Lines LN and IM are Parallel; for as the Angles B and C, opposite at the Vertex, are equal, and C is equal to F; the external Angle B will be equal to the internal Angle F; therefore by the preceding Demonstration, the Lines LN and IM will be Parallel.

Lastly, if the internal Angles D and F be equal to two Rights, the Lines LN and IM will be Parallel likewise. For the Angles B and D repeated, are equal to two Rights, by the first Theorem: But the Angles D and F are also put equal to two Rights; therefore the external and internal Angles B and F are equal between them, and consequently the Lines LN and IM are Parallel.

From Angles I'll pass to *Triangles, Quadrilaterals, Pentagons, Hexagons, and other Polygons.*

A *Figure* is a Space inclosed on all Sides, whence an Angle is not a Figure, because not inclosed on all Sides. Hence likewise two right Lines do not form a Figure, because they do not comprehend a Space, since for that three Lines at least are required.

Figures are either plane or solid, I'll speak of the solid afterwards.

Plane Figures are those which consist of Lines traced on some Superficies: Which Lines, if right, the Figure is called *Rectilinear*; if Curve, *Curvilinear*; if Part curve and part right, *mixt*.

Those Lines whereby the Figure is terminated, taken together, are called its *Circumference* or *Circuit*, or *Perimeter*. Whence Figures which have an equal Ambit, are called of the same Name *Iso-perimetral*.

Of all *Curvilinear*, and *mixt Figures*, Geometers consider in a more particular Manner, the Circle or Partion of the Circle.

Among the *Rectilinears* the most simple is the *Triangle*; because consisting only of three Lines, which form as many Angles.

A *Triangle* is divided either according to its Angles, or to its Sides. If according to its Angles it has either one of those Angles right, and it is called *Rectangular*, as ABC, fig. 14. or it has one of them *obtuse*, and it is called *Amblygonous*, as DEF, fig. 15. or it has them all *acute*, and it is called *Oxygonous*, as GHI, or KLM, fig. 16. and 17.

But if it be divided according to its Sides, and has three Sides unequal, it is called *Scalenous*, as ABC, fig. 14. if it has only two Sides equal, it is called *Isoceles* or *Equicrural Triangle*, as KLM, fig. 17. If it has all the Sides equal, it is said to be *Equilateral*, as GHI, fig. 16.

If two Sides of a *Triangle* be taken, they may be called *Limbs* or *Legs*, and then the third Side will be called the *Base*: Any Side may be taken for the *Base*: Though in a *Rectangular*, or *Amblygonous Triangle*, the greatest Side, viz. that which is opposed to a right Angle, or to an *obtuse*, is commonly called the *Base*, or the *Hypoteneuse*, where it is Question of a rectangular Triangle: But in an *Isoceles Triangle* the unequal Side is the *Base*.

The Figure which follows next the Triangle is the *Quadrilateral*, which consists of four right Lines, and as many Angles.

If the *Quadrilateral* has its opposite Sides Parallel, and equal to each other, it is called *Parallelogram*, as ABCD, fig. 18. otherwise *Trapezium*, as EFGH, fig. 19.

If the *Parallelogram* has four right Angles, it is called simply *Rectangular*, as IKLM, fig. 20.

If all the Sides of a *Rectangular* be equal, it is called a *Square*, as CDEF, fig. 21. which some make a Species of *Parallelogram*, others not: But if there are but the opposite Sides equal, it is said *longer on the other Parts*.

If all the Sides be equal, and the Angles unequal, it is call'd a *Rhombus*, or *Lozenge*, as GHIK, fig. 22.

If both the Sides and Angles be unequal, it is call'd a *Rhomboides*; as ABCD, fig. 23.

A *Parallelogram* is marked with four Letters, placed at the four Angles, as ABCD, fig. 23. and likewise for Brevity Sake diametrically opposite, as BC and the Diameter, or diagonal Line, is that carried from an Angle of the *Quadrilateral*, to that opposite to it, as BC.

If thro' the Point I, taken in the Diagonal BC, fig. 24. the two right Lines EF, GH, are drawn Parallel to the Sides, the whole *Parallelogram* will be divided into four *Parallelograms*; two of which, viz. EG, HF, are call'd *Parallelograms*, towards the Diameter, and the two others, AI, ID, *Complements*.

If the Figure has more than four Angles, and more than four Sides, it is call'd a *Polygon*; if six Sides, an *Hexagon*; if seven, a *Heptagon*.

Note, That in every *Parallelogram* the Sum of the Squares of the two Diagonals is equal to the Sum of the Squares of the four Sides. This Proposition M. de Lagny takes to be one of the most important of all *Geometry*; he even ranks it with the celebrated 47th of *Euclid*, and with that of the Similitude of Triangles; and adds, that the whole first Book of *Euclid* is only a particular Case hereof: For if the *Parallelogram* be rectangular, it follows that the two Diagonals are equal; and of Consequence, the Square of a Diagonal, or which comes to the same Thing, the Square of the Hypoteneuse of a right Angle, is equal to the Squares of the Sides. If the *Parallelogram* be not rectangular, and of Consequence the two Diagonals be not equal, which is the most general Case, the Propo-

Proposition becomes of vast Extent: It may serve, for Instance, in the whole Theory of compound Motions, &c.

First THEOREM.

In all Triangles, the outward Angle is equal to two opposite inward; and three Angles are equal to two Rights.

Let the Triangle be ABC , fig. 24. whose Side BC must be produced in D : I say, *First*, That the external Angle ACD , is equal to the two opposite internals, A and B : *Secondly*, That the three Angles A and B , and ACB , are equal to two right Angles.

Demonstration of the first Part. Let the Line CE be conducted Parallel to BA ; and then the right Line AC will fall on the Parallels AB and CE ; therefore the Angle A , or BAC will be equal to the alternate ACE : Likewise, the right BC will fall on the Parallels BA and CE ; therefore the internal Angle B is equal to the external ECD , and consequently the two A , and B , are equal to the two ACE , and ECD , *i. e.* to the whole ACD .

Demonstration of the second Part. The two Angles A and B , are equal to the Angle ACD . Therefore the common ACB being added, the three Angles A , and B , and ACB , are equal to the two ACD , and ACB ; but ACD , and ACB , being repeated, are equal to two Rights: Therefore the three A , and B , and ACB , are equal to two Rights, according to this Axiom, *That Things equal to the same Thing, are also equal between themselves.*

Note, That *Pythagoras* is supposed the Author of this important Question, which is the 32d of the first Book of *Euclid*; and because it is of a continual Use in *Geometry*, it must be very well learned; though I have another Manner of demonstrating it, which will appear easier to my Pupils; and which is as follows.

Let the Triangle be ABC , fig. 25. I say, 1. That the three Angles A , and C , and B , are equal to two right Angles; but if the Line EF be drawn parallel to the Side CB , it is certain that the Angles c and b , adjacent to the Angle A , joined together with that Angle A , are equal to two right Angles; but the Angle c , is equal to the Angle C , and the Angle C to the alternate Angle B : Therefore, likewise, the Angles C and B , joined to the Angle A , are equal to two Rights, according to the Axiom, *That if Equals be added to Equals, all will be equal.*

I say, 2. That the external Angle d , is equal to the two internals A and C , opposite to it; for the external Angle d , and the internal B , taken together, are equal to two Rights: But the Angles A and C , together with the Angle B , are equal, likewise, to two right Angles, by the preceding Demonstration; then the external Angle d , is equal to the two opposite internal A and C .

COROLLARIES.

Three Angles, of any Triangle, taken together, are equal to three Angles taken together of any other Triangle; for they are every where equal to two Rights.

Every Triangle must have two acute Angles; for if it had but one, the two others would be either right, or obtuse, which cannot be said; since three Angles of a Triangle are together equivalent but to two Rights.

As often as two Angles in a Triangle, or separate, or together, will be equal to two Angles, or separate, or together in another Triangle, so often the third will be equal to the other third Angle.

Second THEOREM.

In all Triangles the greater Triangle, is that opposed to the greater Side, and *Vicissim*.

For the Angle E , fig. 26. opposed to the greater Side DF , is greater than the Angle D , or the Angle F ; but as the Magnitude of the Angle is taken from the Distention of the Lines it consists of; and the more those Lines are distended the greater is the Side; it is evident that the Angle E , opposite to the greater Side, is greater than any of the two others, D or F .

Likewise, for the same Reason the greater Side is opposed to the greater Angle.

COROLLARIES.

In the equilateral Triangle GHI , the three Angles are equal between them, because opposed to equal Sides. They are also all Acutes, for they cannot be all right, or all obtuse, by what we have already observed.

In the Isosceles Triangle, KML , fig. 28. the Angles K and L , placed on the Base KL are equal, because opposed to equal Sides.

The Perpendicular AB , fig. 29. is the shortest of all the Lines, which can be drawn from the Point A , to the Right BC : For as the Angle B is a right one, the Angle ACB must be acute: Therefore AB is less than any of the Lines AC .

From a Point to a right Line there can't be drawn but one Perpendicular.

Third THEOREM.

If one Side of two Triangles be equal to one, and the other to the other; and the Angles contained in those Sides be likewise equal, the Bases and all the Triangles will be also equalized.

For if we understand that the Triangle DEF must be put over the Triangle ABC , the Angle E will be congruous with the Angle A , equal to it, and the Sides ED and EF will agree with the equal Sides AB , and AC ; so that the three Points D , E , F , will fall on the three Points B , A , C ; therefore the whole Base DF will fall on the whole Base BC , then there will be a Congruency between the Angles D and F , and F and C , and with all the Triangles; and therefore all will be equal, by the Axiom, *That all Things which agree mutually are equal*, which was to be demonstrated.

COROLLARIES.

For the same Reason, *viz.* from the Congruency of two Triangles, if they should have all their Sides mutually equal, they'll have, likewise, all the Angles equal, which are opposite to equal Sides, and all will be equal.

Likewise if in a Triangle, two Angles taken separately, were equal to two Angles of another Triangle, taken also separately, and one Side was equal to the other Side, all the rest would be equal; because if a Triangle be imposed on another Triangle, they'll agree mutually.

Fourth THEOREM.

In all Triangles, any two Sides are greater than the third: This Proposition is like the Axiom of *Archimedes*.

For, as we have already observed, a right Line is the shortest of all the Lines drawn from one Point to the other Point: And as when one Side of the Triangle is conducted, in a direct Line, from one Point to the other, the two other Sides deviate from the strait Way; any two Sides of the Triangle must be greater than the third.

Fifth THEOREM.

The opposite Sides of Parallelograms are equal, and likewise the Angles, and the Parts made by the Diameter.

Because AB , and CD , fig. 23. are parallel; and the right Line BC falls on them, which is the Diameter, or diagonal Line of the Parallelogram $ABCD$, the alternate Angles ABC , and BCD , will be equal. Likewise, because AC and BD are parallel, and the right Line BC falls on them; the alternate Angles ACB , and CBD will be equal: Therefore the whole Angle ACD , is equal to the whole Angle ABD .

In the same Manner I'll shew the Angles A and D , to be equal between them.

But because the Triangles ABC , and CDB , have a common Side BC , and the Angles adjacent to that Side are equal, the Side AC will be likewise equal to that BD , as AB to CD ; and likewise those Triangles will be equal.

COROLLARIES.

The Complements AI , ID , fig. 12. are also equal between themselves; for the two great Triangles CBA , and

and CBD, are equal to the present Theorem: Therefore, if from them are drawn the equal Triangles CIH, CIF, and IBG, the residuous Spaces AI, ID, which are the Complements of the Parallelogram, will be equal.

Between the Parallels AB, CD, fig. 4. the Lines AC and BD, equally inclined towards them, are equal. The same Thing may be said of the Lines IL and KM, fig. 9. placed between IK, and LM, and perpendicular to them. For a Parallelogram is formed on either Way, whose opposite Sides are equal.

Sixth THEOREM.

Parallelograms, placed on the same Base, and between the same Parallels, are equal.

Let the *Parallelograms* be AE and AD, fig. 30. placed on the same Base AB, and between the Parallels AB and CD; I say that they are equal, for in the Triangles ACF and BED, the Side AC is equal to the Side BE. By the preceding Theorem likewise the Lines CE and FD, being equal to the same AB, by the same Theorem; if to both be added the common Part EF, the whole Side CF will be equal to the Side ED, in the aforesaid Triangles; but because of the Parallels AC and BE, the internal and external Angles ACF, and BED are equal; therefore the Triangles ACF and BED are equal: Therefore if the common Part GEF be taken off, both the Parallelograms CB and AD, will be equal; which was to be demonstrated.

COROLLARIES.

The same Demonstration may be easily applied to Parallelograms placed on equal Bases, and between the same Parallels.

Triangles likewise, placed on the same or equal Bases, and between the same Parallels are equal: For the Triangle ACB, fig. 30. is half of the Parallelogram ABCE, as the Triangle AFB is half of the Parallelogram ABFD; and those Parallelograms AE, AD, are equal by the present Theorem; and therefore the Triangles are also equal by this Axiom, which are Halves of the same Thing, are equal between themselves.

Seventh THEOREM.

All Polygons may be divided into so many Triangles as it has Sides: For if within the Heptagon BCD FGH, fig. 30. the Point A be taken, from which Lines are conceived drawn to every Angle AB, AC, AD, &c. it is manifest that there will be as many Triangles, as there are Angles in the Polygon.

COROLLARIES.

All the Angles together of any regular rectilinear Figure, adequate twice as many right Angles, taking off four, as the Figure has Sides.

Let right Lines be drawn from the Point A, within the same Figure, to all its Angles, which may cut it into so many Triangles as it has Sides; and because the Angles of every Triangle are equal to two Rights, the Angles of all together are twice equivalent to so many Rights as there are Sides; but the Angles placed round the Point A, are equal to four Rights: Therefore if you take off from all the Triangles, the Angles round the Point A, the remaining Angles placed at the Circumference of the Figure, adequate twice so many right Angles, taking off four, as the Figure has Sides.

Therefore, if we want to know to how many right Angles, the Angles of a regular rectilinear Figure are equivalent, we must take 4 off the Product, the right Angles will remain, which are adequated by the internal Angles of the Figure. Thus a *Chiliagon*, or a Figure of 1000 Sides, has 1996 Angles equal to right Angles.

From the Triangle I'll pass to the Circle.

DEFINITIONS.

A CIRCLE, is a plane Figure, comprehended under one single Line, which returns into itself, having a Point in the Middle, from which all the Lines drawn to the Circumference are equal. Properly speaking, it is the Space included within the Circumference, or Periphery, that is

the Circle; though in the popular Use of the Word, Circle is frequently used for the Periphery alone.

This *Circumference*, or *Periphery*, is the Line terminating the Circle, which Mathematicians divide into 360 Parts, which Parts are commonly call'd *Degrees*: Therefore, a Semi-circumference is divided into 180 Parts; and a Quarter of a Circle into 90. Each *Degree* is divided into 60 *Minutes*, each Minute into 60 *Seconds*, each Second into 60 *Thirds*, &c. Mathematicians have chosen these Divisions as the most commodious.

The *Center* of the Circle, is the Point from which all Lines are carried equal to the Circumference, as the Point A, fig. 32.

The *Diameter*, is a right Line passing through the Center of the Circle, and terminated on each Side by the Circumference thereof: Such is the Line BC in the same Fig.

The *Radius*, or *Semidiameter*, is a right Line drawn from the Center to the Circumference; as AF, and AE, in the same Fig.

The *Semicircle*, is a Figure comprehended between the Diameter of the Circle, and half its Circumference: Such is BGC in the same Fig.

The *Chord*, is a right Line; terminated at each Extreme in the Circumference of the Circle, without passing through the Center; dividing the Circle into two equal Parts, call'd *Segments*; as the right Line DE, in the same Fig.

The *Arch*, is a Part of the Circumference of the Circle, less than a half, or Semicircle; as the right Line DE, in the same Fig.

Note, That each *Arch* is the Measure of an Angle, comprehended in the Center of the Circle, by two Radii drawn to the Extremes of the *Arch*. Thus the Arch DLE is the Measure of the Angle DAE, in the same Fig. and as in the Center of every Circle there may be formed four right Angles, which should divide the whole Circumference of 360 Degrees into four *Arches* of 90 Degrees each; each right Angle must be of 90 Degrees, as BAF, or FAC in the same Fig. Therefore, as we have already observed, all the right Angles are equal between themselves, because each consisting of 90 Degrees; consequently obtuse Angles contain more than 90 Deg. as GAC, in the same Fig. but the acute Angles contain less than 90 Degrees; and are not always equal between themselves, as FAG, GAB, BAD, DAE, EAC, in the same Fig. besides, as often several Angles take up the same Number of Degrees of their Circumference, they are as often equal between themselves.

The *TANGENT*, is a right Line which touches the Circle, that is, meets in such a Manner as that though infinitely produced, it would never cut the same, that is, never come within the Circumference. Such is the Line HC, fig. 35. which touches the Circle in the Point C, and is call'd the *Tangent* of the Arch BC, or of the Angle BAC, measured by that Arch. Such is likewise the Line LF, called the *Tangent* of the Arch BF, fig. 43. or of the Angle CAF, fig. 42. and such is the Line EBF, fig. 33.

The *Line Secant* of some Arch is a right Line drawn from the Center carried through the other Extremity of the same Arch, and terminated by the Tangent: As the Line ABH, fig. 45. CB is the *Secant* of the Arch, or of the Angle CAB; as likewise, the Line ABL is the *Secant* of the Arch BF, or of the Angle BAF.

The *right Sine* of an Arch is a right Line drawn from one Extremity of the Arch, perpendicularly upon the Radius drawn from the other Extremity; or the *Sine* is half the Chord, of twice the Arch; as the Line BI, is the *right Sine* of the Arch BC, in the same Fig. Hence the *Sine* of a right Angle is the Radius itself, its being half the Chord of a Semicircle: It is called the *whole Sine*, viz. the greatest of all.

The *Sine BG*, is call'd the *Sine-Complement*, or *Co-Sine*, of the Arch BC; because the Arch BF, is the Complement of the Arch BC, to a Quadrant; for CBF, is a Quadrant of a Circle in the same Fig.

The *versed Sine*, is Part of the whole Sine, or Radius,

dius intercepted between the right Line and the Arch; as ICS is the *Sine* towards the Arch BC , because it is Part of the Semidiameter AC , intercepted between the Arch BC , the double of the Arch BC , at its subtended BIK , in the same Fig.

Note, That the *Sines* of obtuse Angles, are the same with those of their Complements to two right Angles; and that all *Sines* of similar Arches have the same Ratio to their Radii.

The *SEGMENT of a Circle*, is a Part of the Circle comprehended between an Arch and the Chord thereof. Or it is a Part of a Circle comprehended between a right Line less than a Semicircle, and a Part of the Circumference, as DLE , fig. 32. is the *lesser Segment*; and DFE the *greater Segment*.

The *Angle of a Segment*, is that made by the Tangent, and the Chord carried through the Point of Contact; such are the Angles $EB C$, of the lesser Segment, and $FB C$, of the greater Segment, fig. 32. where it must be observed, that the *Segment* CAB , is call'd *alternate*, with regard to the Angle of the Segment CBE , as the Segment CLB is call'd *alternate*, with regard to the Angle of the Segment $FB C$.

Angle in the Segment, is that contained within two right Lines, carried from the Extremities of the Chord to some Point of the Arch; as the Angle BAC , on the Segment BAC , fig. 33. This Angle is call'd also *Angle to the Circumference*.

Angle at the Periphery, is an Angle whose Vertex and Legs do all terminate in the *Periphery* of a Circle; such is the Angle BDC , fig. 33.

The *SECTOR of a Circle*, is that Part of the Circle, comprehended between two Radii and the Arch; such is BCD , comprehended under the Radii BD , and DC , and under the Arch BLC .

Similar SEGMENTS, are those which contain equal Angles: Thus the *Segments* of the greater and lesser Circle will be similar, if they contain equal Angles; as the Arch efg in the lesser Circle, and BCD in the greater, are similar, because they contain the equal Angles eAg , and BAD , fig. 34.

Equal CIRCLES, are those whose Diameters and Radii are equal.

First THEOREM.

A Diameter, perpendicular to the Chord cut in two, *viz.* BD , fig. 36. is divided into two by the Diameter AFC ; for the Sides BF , and FD , being equal, by the Definition of the Circle, the Triangle BFD is *Isoceles*; therefore the Angles in B and D are always equal to the Base BD ; but in the Triangles BCF , DCF , the Angle to C are right, because of the Perpendicular FC , which is also the Side common to both: Therefore those Triangles are entirely equal; and consequently the Side BC is equal to the Side CD , which was to be demonstrated.

COROLLARIES.

For the same Reason it will be demonstrated, that the right Line which cuts perpendicularly the Chord in two, is the Diameter of the Circle, or passes through the Center; and the Right which passes through the Center, and divides the Chord in two, is perpendicular to it.

The Rights, without the Center, do not divide themselves mutually.

Second THEOREM.

If through the last Term B of the Diameter be carried DB , fig. 37. perpendicular to the said Diameter, it will touch the Circle in that sole Point.

For any other Point of that Perpendicular, *v. gr.* the Point D will be out of the Circle: And if the Line AD be conceived drawn from the Center A to the Point D , there will be in the rectangular Triangle the Angle ABD greater than the rest, to which the greater Side is opposite, and which therefore is greater than the Radius AB : And thus the Point D falls out of the Circle; which was to be demonstrated.

COROLLARY.

No right Line can be drawn between the Tangent, and the Circumference, through the Point of the Contact B , in the same Fig. without its cutting the Circle. For let it be, if it be possible, BC , because the Angle ABD is a right Angle, ABC will be acute: Therefore the drawn Perpendicular AD , will be less than the Radius AB , which is opposed to the right Angle; consequently the Point d falls within the Circle.

Third THEOREM.

The Angle at the Center is twice the Angle at the Circumference, if they are both fixed to the same Arch.

Three Cases may be considered in this Definition. The *first*, when one Side of the Angle on the Circumference falls from one Side of the Angle at the Centre. The *second*, when the Sides of the Angles at the Circumference, include the Angles at the Center. The *third*, when the Sides of the Angle at the Circumference, and the Angles at the Center cut one another.

Let then the Angles ABC , and ADC , in the first Case, fig. 38. be fixed to the same Arch; I say that the Angle ABC in the Center is double the Angle D in the Periphery. For the Angle ABC is external with regard to the Triangle CDB . Therefore it is equal to two internal D and C ; but these Angles D and C are equal, when opposed to the Radii, or equal Sides, BC and BD : Therefore the Angle ABC is double the Angle D .

Likewise in the second Case, fig. 39. the Angle ABC is double the Angle ADC : For if the Line DBE be drawn passing through the Center B , the Angle ABE is double the Angle ADE , and the Angle EBC double the Angle EDC , by the preceding Demonstration; therefore the whole Angle ABC is double the whole Angle ADC .

Lastly, in the third Case, fig. 40. the Angle ABC is double the Angle ADC ; for, if the Line DBE be drawn, the whole Angle CBE , by the preceding Demonstrations, is double the Angle CDE . Likewise, the Angle ABE is double the Angle ADE : These then being taken off, the Angle ABC remaining, will be double the remaining ADC ; which was to be demonstrated.

SCHOLIUM.

We have said in the 8th Definition, that the just Measure of the Angle placed in the Center, is the Arch comprehended between two Radii. When then we say that the Measure of any Angle, *v. gr.* ADC , fig. 38, 39. is this, or that Arch, we understand that Angle to be equal to the Angle placed in the Center; whereof this or that Arch is the Measure. Whence we make the following Deductions.

COROLLARIES.

The Angle of the Center ABF , fig. 38, 39. fixed to the Arch AF , is equal to half the Arch AC , to which the Angle ADC is fixed at the Circumference: For the Angle in the Center ABC , is double the one and the other; and the whole Arch AC , being the Measure thereof, the Arch AF , *i. e.* half AC , will be the Measure of the Angle ABF , and consequently of the Angle ADC , at the Circumference.

The Angles in the same Segment ADC , $A d C$ are equal between themselves; every one being equal to half the Angle ABC , placed at the Center, or have the same Measure, according to the preceding Corollary, *viz.* half the Arch AC , to which they are fixed.

The Angle ADB , fig. 41. in the Semicircle, is a Right Angle; for its Measure is a Quadrant, or half of the Circumference AEB , to which it is fixed. For the same Reason, the Angle ABD in the lesser Segment, will be obtuse, and the Angle ABD in the greater Segment, acute; for that is fixed to the greater Arch, and this to the lesser. Therefore the Measure of that will be an Arch greater than half the Circumference, and the Measure of this a lesser.

The opposite Angles D and A , or I and E , inscribed

to the quadrilateral Circle I D E, fig. 42. are equal, for the two Arches to which are fixed the two opposite Angles, take up the whole Circumference, which is the Measure of two right Angles.

Fourth THEOREM.

The Angle of the Segment form'd by the Tangent of the Circle, and the Chord carried through the Point of the Contact, is equal to the Angle form'd in the alternate Segment.

For let the Tangent F A G, fig. 42. and the Chord A D be drawn, I say that the Angle F A D, is equal to the Angle A E D, in the alternate Segment; and the Angle G A D equal to the Angle A I D, likewise in the same Segment; carried to the Diameter A C B, the Angle F A B will be a right Angle. But the Angle A D B in the Semicircle, is a right Angle; therefore in the rectangular Triangle A D B, the two Angles D A B, D B A, are equal to a right one. But the same Angle D A B, with the Angle D A F, forms a right Angle; therefore the Angles D A F, and A B D, or A E D in the same Segment, even an alternate one, are equal.

I say, that the Angles G A D, and A I D, are equal; for in the Quadrilateral A I D E, the opposite Angles I and E, are equal to two rights. But the Angle E is equal to the Angle F A D, by the preceding Demonstration, then the Angle I, will be equal to the Angle D A G.

COROLLARIES.

The Measure of the Angle of the lesser Segment F A D, is half the Arch A I D, subtended by the Chord A D, like the Measure of the Angle D A G, of the greater Segment, is half of the Arch A E D. The two Tangents F B, F D, fig. 43. are equal. For the Chord B D joining the Points of the Contact, being drawn, the Angles F B D, F D B, are made equal. The Measure of both being the same, viz. half the Arch subtended by the Chord. Therefore an Isosceles Triangle is formed.

Fifth THEOREM.

All Polygons, circumscribed by a Circle, are equal to a rectangular Triangle, one Leg whereof is equal to the Radius of the Circle, and the other to the whole Periphery of the Polygon.

For in the indefinite right Line A A, fig. 45. let the Bases, A B, B D, &c. be taken, equal to the Bases into which the Polygon is divided, fig. 46. then in the Point A, fig. 45. must be drawn the Perpendicular A C, equal to the Radius C g, fig. 45. i. e. equal to the Altitude of the Triangles contain'd in the Polygon; and let C P be parallel to the Base A A, that all the perpendicular Lines, c g, c b, &c. fig. 46. may be equal to one another, as well as to the Radius c g, fig. 45.

It is manifest that the white Triangles A c B, B c D, &c. fig. 45. are equal to the Triangles a c b, b c d, &c. fig. 46. into which the Polygon is divided. But to those white Triangles, are equal those mark'd with black Lines, fig. 45. e. gr. the white Triangle A g c, is equal to the black Triangle A C c; and the white Triangle B c g, to the black Triangle B n c, &c. therefore the whole Parallelogram A P, is double the white Triangles.

But the same Parallelogram A P, is double the Triangle A A C; therefore the rectangular Triangle A A C, the one Leg whereof A A, is equal to the Periphery of the Polygon, and the other A C, equal to the Radius c g; that rectangular Triangle A A C, says I, is equal to the white Triangles 45, and consequently to the whole Polygon 44.

Sixth THEOREM.

All ordinate, or regular Polygons, (formed of the equal Chords of a Circle) drawn in a Circle, are equal to the rectangular Triangle, one Leg whereof is equal to the Periphery of the Polygon, the other to the Perpendicular c g, fig. 46. carried from the Center c, to either Side of the Polygon, a b.

The Demonstration is the same as that of the preceding Theorem.

COROLLARY.

As a Polygon of almost infinite Sides, can be circumscribed or inscribed by a Circle; it follows hence, that their Perimeters can attain *in infinitum*, the Circumference of the Circle, tho' the Perimeter be always greater than the Circumference of the circumscribed Circle, and lesser than that of the inscribed.

But the Polygon circumscribed by a Circle, is equal to a rectangular Triangle, one Leg whereof is the Radius of the Circle, and the other the Perimeter of the Polygon; for a Polygon formed within a Circle, is equally equal to a rectangular Triangle, one Leg whereof is the Perimeter of the Polygon, and the other a Perpendicular drawn from the Center of the Circle to any Side of the Polygon. Therefore the Circle will be, likewise, equal to a rectangular Triangle, one Leg whereof is equal to the Radius, and the other to the Circumference of the Circle; as demonstrated by *Archimedes*, in his small Book of the Dimension of the Circle.

SCHOLIUM.

Though the Perimeter of a Polygon, either drawn round a Circle, or within a Circle, may attain *in infinitum*, to the Magnitude of the Circumference of the same Circle, it notwithstanding never becomes equal to it. Whence, by that Method, we can never have a Line equal to the Circumference of a Circle; *in which consists the Difficulty of the QUADRATURE OF THE CIRCLE*, for if we could find that Line, we could form a rectangular Triangle, equal to the Circle; and a Parallelogram equal to that Triangle; and a Quadrate equal to that Parallelogram. As I'll shew by the Problems relating to this Subject.

Of the SOLIDS.

DEFINITIONS.

SOLID, is a Magnitude, endued with three Dimensions, or extended in Length, Breadth, and Depth. Hence, as all Bodies have these three Dimensions, and nothing but Bodies; *Solid* and *Body*, are frequently used indiscriminately.

The Extremity of the *Solid*, is the Superficies; that of the Superficies, a Line; and that of a Line, a Point.

As a Plane Angle consists of right Lines drawn on a Plane Superficies, likewise a *Solid* Angle consists of several Plane Angles, but which are not placed on the same Plane.

Therefore a *Solid* Angle is rectilinear, and is form'd by three or more plane Angles B O A, C O A, &c. or D O E, E O F, fig. 47. not placed in the same Plane, but meeting in the Point O.

A *Prism* is an oblong *Solid*, contain'd under more than four Planes, and whose two Bases A B C, and O E F, or G H, and K L, are equal, parallel, and alike situated; and the rest Parallelograms.

The Prism is generated by the Motion of a rectilinear Figure, descending always parallel to itself, along a right Line.

If the Describent be a Triangle, the Body is said to be a *triangular Prism*; if a Square, a *quadrangular One*, &c.

From the Genesis of the Prism, it is evident it has two equal, and opposite Bases; that it is terminated by as many Parallelograms, as the Base consists of Sides; and that all the Sections of a Prism parallel to its Base, are equal.

A *Parallelepiped* is one of the regular *Solids*, comprehended under six Parallelograms, the opposite ones whereof are similar, parallel, and equal; as K O L P G H I, fig. 49. Therefore all Parallelepipeds are Prisms, but all Prisms are not Parallelepipeds.

If a regular *Solid* consists of six Squares and equal Faces, or Sides, and its Angles all right, and therefore equal, it is a Cube. Whence all Cubes are Parallelepipeds, but all Parallelepipeds are not Cubes.

Note, The Method has not been found yet in *Geometry*, of forming a Cube, double another Cube; or the Duplication of the Cube has not been yet geometrically effected.

effected. In this consisted the Difficulty which perplexed the *Delians*, when the Oracle promised them, and the other *Greeks*, the End of their Calamities, if they could double the Altar they had in *Delos*, which was a Cube; for ignorant of the Rules of Proportion, by doubling each Side of the Altar, instead of double made it an Octuple. As if one was to join to a Dice, which is cubical, another Dice equal to it, it would form a Parallelepiped, whose Length would be double its Height and Breadth. If two other Dices were added to the first, so as to form together a square Figure, there would result hence a Parallelepiped, whose Length would be equal to its Breadth; but both Heights will become double. Lastly, if to those four Dices be added four others equal to them, there will arise a cubical Figure octuple the other, because every Side of that Figure will be double the Sides of the first Dice.

In this Anxiety, Deputies were sent from *Delos* to *Plato* (according to *Plutarch*, *Lib. de gen. Socrat.*) who was then perhaps on his Voyage towards *Caria*, to ask him, he being well vers'd in *Geometry*, the Explication of the Oracle. *Plato* answer'd the *Greeks*, that the Gods gam'd them for neglecting the Sciences, insulted to their Ignorance, and commanded them thereby tacitly to apply themselves to *Geometry*: That there was but one Manner of doubling a Cube, which was, to two Lines given, find two mean Proportionals, between the Side of the Cube, and double that Side; which has not been found yet in *Geometry*; though the *Sieur De Comiers*, has published an elegant Demonstration of the same Problem, by Means of a Compass with three Legs: But this Method is mechanical, as well as all the others found before.

The PYRAMID, *A B C o*, or *D E F o*, fig. 47. is a Solid standing on a square, triangular, or polygonal Basis, and terminating at Top in a Point; or a Body whose Base is a regular rectilinear Figure, and whose Sides are plain Triangles; their several Vertices meeting together in one Point.

Euclid defines it a solid Figure, consisting of several Triangles, whose Bases are all in the same Plane, and have one common Vertex.

Therefore the Plane *A B C*, is called the *Basis* of the *Pyramid*; and may be either a Triangle, or a Quadrangle, or any other Figure, from each Side whereof Triangles are rais'd to the Point *O*, which is called the Vertex; from whence the Perpendicular *O I* falling, it measures the Height of the Pyramid.

If without the Plane of some Circle *C F*, fig. 51. from which the indefinite right Line *O F* be drawn, touching the Circle in *F*; and which, the Point *O* remaining fix'd, may be turn'd round the Periphery of the Circle, till it returns to the Place *O F*, whence it begun to move: The Superficies, describ'd by the right Line *F*, will be conical; and the Body contain'd in that Superficies, and the Circle, call'd a *Cone*. *O* is the Vertex of the Cone; the Circle *C F* its Basis; the right Line *O I*, drawn from the Vertex to the Base, its Axis; and the right Line drawn from the Vertex to the Circumference of the Basis, the Side of the Cone.

Note, That a Cone may be cut in five different Manners,

1. By a Plane through the Vertex *A G B*, fig. 55. and the Triangle *A G B* is made.
2. By a Plane, parallel to the Base, and a Circle is form'd.
3. By the Plane *F S F*, parallel to the Side of the Cone *A G*, and this Section is called *Parabola*.
4. By the Plane *K L R*, which passes through the Vertex of the Cone, without the Superficies thereof, that is neither cutting, nor touching it; and the Cone being again cut by another, parallel to the former; and this Section is called *Ellipsis*.
5. By the Plane *E Q D*, which cut the Cone any how through the Vertex; and by another plane Parallel to the former Plane; then the Section made in the Superficies thereof is called an *Hyperbola*. But when Geometers mention *Conick Sections*, none must be understood but the three last, viz. the *Parabola*, *Ellipsis*, and *Hyperbola*.

The Names of these Sections derive from the particular Properties of each of them.

For the *Parabola* is thus called, because the Squares of the Ordinates are equal to the Rectangles under the Part of the Diameter intercepted between the Vertex of the Parabola, and contain'd under the Parameter of the said Diameter. Thus in the Parabola, *D A R r*, fig. 56. if the several Sides *O R*, *o r*, be parallel, and each of them be cut in two by the right Line *A O o*, they will be called *ordinate* to that Line *A O o*, which is one of the Diameters of the Parabola. And the Diameter, which, with its Ordinates, form right Angles, as the Line *A O o*, is called the Axis of the Parabola.

Therefore the Square *O T*, or *o t*, of the Ordinate *O R*, or *o r*, in the Parabola, is always equal to the Rectangle *O P*, or *O P*, formed under the Part of the Diameter *O A*, or *O A*, intercepted between the Ordinate *O R*, or *o r*, and the Vertex *A*, and under the right *A P*, called the Parameter of that Diameter.

The Parameter of the Diameter *A O o*, viz. that which is the Axis of the Parabola, is the Quadruple of the Line *A F*, or of the Distance of the Focus from the Vertex of the Parabola *A*. The Parameter is found, if it be contrived, in that Part of the Axis *A O*, intercepted between the Vertex *A*, and the Ordinate, to the Ordinate *O R*; the same as *O R* to the Parameter.

But omitting these which belong to the most abstruse *Geometry*, our Pupils must only remember, that a Parabola is defin'd a Figure arising from the Section of a Cone, when cut by a Plane, parallel to one of its Sides. From the same Point of a Cone, therefore only one Parabola can be drawn; all the other Sections within those Parallels being Ellipses, and all without Hyperbola's. *Wolfius* defines the Parabola to be a Curve wherein $a x = y^2$, that is, the Square of the Semi-ordinate, is equal to the Rectangle of the *Abscisse*, and a given right Line, called the Parameter of the Axis, or *Locus Rectum*. Hence a Parabola is a Curve of the first Order; and as as the *Abscisses* increase, the Semi-ordinates increase likewise; consequently the Curve never returns into itself. Hence, also, the *Abscisse* is a third Proportional to the Parameter, and Semi-ordinate; and the Parameter a third Proportional to the *Abscisse*, and Semi-ordinate; and the Semi-ordinate a mean Proportional between the Parameter, and *Abscisse*.

The *Ellipsis* is thus called from the Square *O T* of the Ordinate *O R*, fig. 57. being equal to the Rectangle *A S*, which applied to the Parameter *A P*, is deficient from the Rectangle *O P*, comprehended under Part of the Axis *O A*, and under the Parameter *A P*, all these are determined thus: As the greater Axis *I A*, is to the lesser Axis *M N* of the Ellipsis, *M N* is to the Parameter *A P* of the greater Axis. Therefore the Perpendicular *A P* being drawn to the Extremity of the Diameter *I A*, the Triangle *I P* is formed, which is called the *Figure of the Axis I A*; the Diameter *I P* thereof, will occur to the Diameter *I A* of the ordinate Line *O R*, and produced in *S* if it be necessary: Whence will be formed the Rectangle *A S*, equal to the Square *O T* of the Ordinate *O R*. But that Rectangle *A S* falls from the Rectangle contain'd under Part of the Angle *A O*, and the whole Parameter *A P*. It falls, I say, by the small Rectangle *S P*, which is semblable to the Figure *I P*. If from the Extremity *N* of the lesser Axis *N M*, be described the Arch *F f*, by the Interval *N f*, equal to the greater Semi-Axis *C I*, the Points *F f* will be the Foci of the Ellipsis, because the Ellipsis is a Figure, every Point of the Circumference whereof, are distant in such a Manner from the Foci, that the two Distances *F N*, *F n*, or *f n*, *f n*, taken together, are always equal to the whole greater Axis *I A*.

The *Ellipsis*, to define it from its Form, is a regular continued curve Line, including a Space that is longer than it is broad, wherein are two Points, equally distant from the two Extremes of the Length, from

from which two right Lines being drawn to any Point, assumed at Pleasure in the *Ellipsis*, their Sum is equal to the Length of the *Ellipsis*.

Lastly, the *HYPERBOLA* is thus called from the Square *OT*, of the Ordinate *OR*, fig. 58. being equal to the Rectangle *AS*, which applied to the Parameter *AP*, exceeds the Rectangle, made under Part of the Axis *AO*, and the Parameter *OP*, by the Rectangle *PS*; because the Figures *VP* are semblable to the Hyperbola *BAD*, and *NVX*, are call'd opposite; the Point *C* is their Center. The Line *AV* is the *determinate Axis*, to which the other undeterminate Axis may be carried at right Angles. The Points *Ff*, are the Foci of the conter-placed *Parabola's*, which are placed in such a Manner, that the Line *FN*, drawn from one Focus, at the Point *N* of the Hyperbola, will always exceed the other Line *FN*, drawn from the other Focus to the same Point *N*, by the Bigness of the determinate Axis *AV*; the right Line *CXC Y*, which drawn through the Center *C*, can never occur to the opposite Sections, are call'd *Asymptotes*.

If round those equal Circles, and the Parallels *BB*, *CC*, fig. 54. the indefinite Line *BC* be turned, till it returns to the Place whence it began to move, so that, while it moves, it remains always parallel to itself, the Superficies described by the right Line *BC* is call'd *Cylindrical*; and the Body contained within that Superficies, and two Circles, a *Cylinder*. The Bases of the *Cylinder* are the said two Circles; the Axis is the right Line *O I*, joining the Centers of the Bases; and the Side of the *Cylinder*, is the right Line *BC*, touching both Bases, in the Superficies of the *Cylinder*.

The *SPHERE* is a solid Body, contained under one single Surface, and having a Point in the Middle, called the *Centre*; whence all Lines drawn to the Surface are equal. The Point *C* is call'd the Center of the Sphere, fig. 59. the Diameter of the Sphere is the right Line *O I*, drawn through the Center, produced and carried to the Superficies, so as to attain to both Extremes; one Half whereof is the Semidiameter *CO*, call'd also Radius.

If a *Globe*, or the greater Circle *AEBD* of a Globe, fig. 60. be moved on the right Sine *D F*, so as for its Center *C* to describe, by an uniform Motion, the Line *CH*, then the Point *D* will be moved, in such a Manner, by a Motion, composed of a Right and a Circular, as to describe the Curve *D d d d d f*, call'd *Cyclois*, or *Trochois*, which are of great Use in the oscillatory Clocks, to regulate the Motion of the Pendulum: There is another Line between that, and marked with Points, which is call'd the *Companion* of the *Trochois*.

Those are call'd regular Bodies, which are terminated on all Sides by regular and equal Planes; and whose solid Angles are all equal. These regular Bodies are five in Number, viz. the *Cube*, *Cc*, fig. 62, 63. which consists of six equal Squares; the *Tetrahedron*, *Tt*, fig. 61. of four equal Triangles; the *Octahedron*, *Oo*, fig. 64, 65. of eight; the *Dodecahedron*, *D d d*, fig. 66. of twelve; and the *Icosihedron*, *Ii*, fig. 67. of twenty.—Besides these five, there can be no other regular Bodies in Nature.

Of PROPORTIONS.

DEFINITIONS.

When two Magnitudes of the same Genus are compared between themselves, the first Term of Comparison is call'd *antecedent*, the second *consequent*: I say Magnitudes of the same Genus, for those of a different Genus cannot be compared between them.

That Comparison, or Habitude, or Relation, can be made in two different Manners; viz. when we consider by how much one of those Quantities exceeds the other, or is exceeded by it; and that Habit is call'd *Excess*, or Difference: Or when it is asked, how many Times, or how one is included in the other, or contains it? and such Habitude is commonly call'd *Ratio*.

If the first Quantity contains twice the second, the first is said to be the second in a *double Ratio*; if thrice, in a *triple Ratio*; if four Times, in a *quadruple Ratio*, &c. and that contained, is said to be in a *subduple*, *subtriple*, *subquadruple*, &c. as a Line of eight Foot, is to a Line of four Foot, in a *duple Ratio*; and a Line of four Foot, to a Line of eight Foot, in a *subduple Ratio*.

If there be several Magnitudes, the first of which has the same *Ratio* to the second, as the second to the third, and the third to the fourth; then the first is said to have a *Ratio duplicate* of that, it has to the second; likewise it is said to have to the fourth a *Ratio triplicate* of that it has to the second: That if there be four Lines, the first of which be of sixteen Feet, the second of eight, the third of four, and the fourth of two; if you search the *Ratio* of the first Line of sixteen Feet to the second of eight Feet, I say that it is *double*, or *duple*, or as 2 to 1; and if the *Ratio* of the first of 16, to the third of 4 Feet, I say that it is twice *duple*, because composed of the *Ratio* of the first Line of 16, to the second of 8 Feet, which is *duple*; and of the *Ratio* of the second, viz. 8, to the third 4, which is also *duple*; whence the *Ratio* of the first to the third, is *duplicate* of the *Ratio* of the first to the second; or is twice *duple*, or rather *quadruple*. Now the *Ratio* of the first to the fourth, or of 16 to 2, is *triplicate* of the *Ratio* of the first to the second. Therefore it must be composed of the *duple Ratio*, which is of the first to the second; and of the *quadruple Ratio*, which is of the same first to the third, and thus it is twice *quadruple*, or rather *quadruple*.

If the first Line has more Magnitude comparatively to the second, than the third to the fourth, the first would be said to have a *greater Ratio* to the second, than the third to the fourth; and the third to have a *lesser Ratio* to the fourth, than the first to the second, which is a familiar Manner of speaking to Geometers.

Therefore all Things which have the same *Ratio* to a Third, are equal; and those Things are equal to such as they have one and the same *Ratio*.

If a Quantity, v. g. a bipedal Line, has some Relation to another, viz. a pedal Line, in whatever Manner the first be multiplied, or divided, it will always have the same *Ratio* to the second, if the second be likewise multiplied or divided in the same Manner: For as a bipedal Line is to a pedal Line, so is a Line of four Feet to a Line of two Feet; or so is a Line of one Foot, to a semipedal Line, &c.

These Magnitudes, thus multiplied by Equality, are call'd *Æque-multiple* of their Simples.

PROPORTION, is the Identity, or Similitude, of *Ratios*, of Differences, or Excesses. The first is call'd *Geometrical Proportion*, and the second *Arithmetical*; but however, when we only mention the Name of Proportion, the *Geometrical Proportion* must always be understood, as the most essential.

Therefore as every *Ratio*, or Difference, requires necessarily two Terms, viz. *antecedent* and *consequent*; every *Proportion* requires four such Terms. The first is called *first Antecedent*; the second *first Consequent*; the third *second Antecedent*; the fourth *second Consequent*. The first and last are call'd the *Extremes*, and the second and third, *Medii*. They are marked in this Manner; 4, 2 :: 6, 3, i. e. 4 is to 2, as 6 is to 3; or a Line of four Feet is to a Line of two Feet, as a Line of six Feet to a Line of three Feet. Those four Terms are *Analogous*, or *Proportional*; and that *Proportion* is call'd *Geometrical*, which is an Equality of *Ratios*. The following *Proportion* is *Arithmetical*; 4, 3 :: 2, 1. because the *Excess* of the *first Antecedent* is the same with respect to the *first Consequent*; as that of the *second Antecedent*, with respect to the *second Consequent*.

The second Term does, sometimes, the Office of the *Antecedent* and *Consequent*, in this Manner, — 8, 4, 2. i. e. as 8 is to 4, so 4 is to 2; or as a Line of 8 Feet is to a Line of 4 Feet: So the same Line of 4 Feet is to the Line of 2 Feet. In which *Proportion*, which is call'd *Continued*, the Line of four Feet is *Consequent*, with respect to the first *Antecedent*; and *Antecedent*, with respect

respect to the second *Consequent*; and this may happen both in the *Arithmetical* and *Geometrical Proportion*.

That Line of 4 Feet, or any other Quantity, which is the Middle between two, is call'd *middle Proportional*; and this either *Geometrically*, or *Arithmetically*.

Note, That a Series or Progression, of more than four *Geometrical Proportions*, is call'd a *Geometrical Progression*.

1. If three Quantities be in continual *Geometrical Proportion*, the Product of the two Extremes is equal to the Square of the middle Term: Thus, in $6:12::12:24$, the Product of 6, and 24, is equal to the Square of 12, *viz.* 144. Hence we have a Rule.

2. To find a mean *Geometrical Proportional* between two Numbers, *e. gr.* 8 and 72; multiply one of the Numbers by the other, and from the Product 576, extract the Square Root 24; this will be the Mean required; more of this in the Theorems.

The third Species of *Proportion*, is the *Harmonical Proportion*, which is often mentioned by the antient Mathematicians. This *Proportion* consists in three Terms, so disposed, that as the Habit of the greater is to the lesser, such is the Habit of the Difference of the greater from the lesser, to the Difference of the middle from the lesser, *v. gr.* let the Numbers be 12, 8, 6; as the greater Term 12 is to the lesser 6, so is 4 the Difference of the greater Term 12 from the middle 8, to 2, the Difference of the middle 8 from the lesser 6; for as the greater Term 12 contains twice the lesser 6, so the Difference 4, which intercedes between 12 and 8, contains twice the Difference 2, which intercedes between 8 and 6.

For the same Reason, 6, 4, 3, or 6, 40, 30, are in the *Harmonical Proportion*, as I'll say elsewhere.

Between the Sides of the Figures, several *Ratio's* or *Excesses* can occur, whereby the Habit of one Figure to the other may be made apparent.

A Line is carried into another, or is multiplied by another, when a rectangular Parallelogram is made of both, Those two Lines being the two contiguous Sides thereof; as the Line LM is carried into the Line LI, when the rectangular Parallelogram, IKLM, fig. 9. is made of both.

If the Line AB, fig. 12. be carried into itself, or into a Line equal to itself, *viz.* if CD be equal to AB, and be multiplied by the Line CE, equal to itself, from that Multiplication will arise the Square EFCD, for all its Sides will be equal.

A Rectangle, or any other Superficies, is multiplied by a Line, when of that Superficies and Line is formed a rectangular Parallelepiped, whose Base be that Superficies; and the perpendicular Altitude be that Line. Thus, *v. gr.* the Superficies ABDH, fig. 55. multiplied by the Line IK, or by the Line BE equal to it, makes the Solid FA, whose Base is the Superficies ABDH, and the Altitude KI, or BE equal to it.

If that Superficies be Square, and multiplied by a Line equal to every one of its Sides; there will arise a *Cube*, every Face whereof will be equal between themselves, as demonstrated by the same Figure.

Of rectilinear Figures those are said to be similar, which have every Angle equal to every others, and their Sides proportional to equal Angles; such are the Triangles ABC, and *abc*, fig. 68, 69. for the Angle A is equal to the Angle *a*, &c. and as the Side AB is to AC, so is the Side *ab* to *ac*, &c. such Sides which answer to themselves in the Proportion, are call'd *homologous*, as AB and *ab*, AC and *ac*, &c.

The Altitude of any Figure, is a perpendicular Line drawn from its Vertex to its Base; as AP, fig. 68. is the Altitude of the Triangle ABC.

The Spaces, or Intervals, comprehended between the Parallels are equal, if their Perpendiculars be drawn equal.

First THEOREM.

In an *arithmetical Proportion*, the Sum of the extreme Terms, is always equal to the Sum of the middle Terms.

As in this *Arithmetical Proportion*, $4.3::2.1$. the additional of the Extremes, *viz.* 4 and 1 make 5; likewise the middle Terms 3 and 2 added together make up 5, and this is easily understood; because, for as much 3 is surpassed by 4; as much 1, which is joined with 4, is surpassed by 2, which is put with 3; therefore the Equality is perfect every where.

Second THEOREM.

But in the *Geometrical Proportion*, the Multiplication of the Extremes, is equal to the Product of the middle Terms.

As in this Proposition $4.2::6.3$. if you multiply 4 by 3, or 2 by 6, you'll have 12. The Reason is; because 4 and twice 2 are the same Thing; the same as 6 and twice 3 are the same Thing. When, therefore, you multiply 3 by 4, it is the same as if you was to take twice 3 and twice 3; or, rather four times 3; when, likewise, you multiply 2 by 6, it is the same as if you was to say twice 3, and twice 3. Whence the Product is equal every where. See fig. 70.

COROLLARY.

If the Proportion be continual, the Product of the middle Term, by itself, *i. e.* its Square, will be equal to the Rectangle of the Extremes.

SCHOLIUM.

Therefore as often as the Product of the Extremes will be found equal to the Product of the Middle Terms, so often four Terms will be in *Geometrical Proportion*. And this will always happen in the following Permutation of Terms: For if it be,

$$4.2::6.3.$$

It will be by inverting $2.4::3.6$.

By alternating $4.6::2.3$.

By compounding $4.+2.2::6.+3.3$.

By dividing $4.—2.2::6.—3.3$.

Third THEOREM.

The Sides of Triangles equiangle, are proportional with Respect to equal Angles, and Vicissim.

Let ABC, *abc*, fig. 68, 69. be the Triangles equiangle; I say that AB is to *ab*, as AC to *ac*, and BC to *bc*; and alternating thus, AB to be to AC, and BC, as *ab* to *ac* and *bc*.

Let the Perpendicular AP in the greater Triangle, fall from the Vertex A, and be divided into so many equal Parts, *v. gr.* 7; and through each Division let right Lines be drawn parallel to the Base BC, which will occur to the Side AB, in the Points F, G, &c. from every one of which must be let fall, likewise, Perpendicular on the Base, or rather on the Part BP of the Base, it is manifest that the Side AB, and the Part BP, of the Base, are divided into so many Parts, as are contain'd in the Perpendicular AP; which Parts will be every one equal between themselves, as well in AB as in BP.

Likewise a Perpendicular being drawn in the lesser Angle *ap*, in which must be taken the Parts *ad*, *de*, &c. equal to the Parts AD, DE, &c. and five must be contain'd in *ap*, like the seven found in AP, and through each Division *de*, &c. let right Lines be drawn parallel to the Base *bc*, which will occur to *ab*, in the Points *fg*, &c. from every one of which must be let fall Perpendiculars on the Base, or Part of the Base *bp*; it is clear that the Side *ab*, and Part of the Base *bp*, are divided into so many Parts equal between themselves, as are contain'd in the Perpendicular *ap*.

Therefore the Number of equal Parts of the Perpendicular AP, in the greater Triangle, is to the Number of Parts of the Perpendicular *ap* in the lesser Triangle, as the Number of Parts of the Side AB, or of the Base BP, is to the Number of Parts of the Side *ab*, or of the Base *bp*.

The same will be demonstrated of the Triangles APC, *apc*; and therefore as the Side AP is to the Side *ap*, so is the Side AC, and PC, to *pc*; and consequently as the whole Base BC, is to the whole Base *bc*, which was to be demonstrated.

Fourth THEOREM.

In rectangular Triangles, a Perpendicular let fall from the right Angle on the Base, makes two Triangles equal to one another, and to the whole, *v. gr.* the Perpendicular A D, fig. 71. makes the Triangles D A B, and D A C, similar to one another, and to the whole Triangle C A B.

For in the Triangles C A B, and D A B, the two Angles C A B, which is a right Angle, and A B C, are equal to the two A D B, which is also a right Angle, and A B D. Therefore the third A C B, is equal to the third D A B; and therefore those Triangles are Equiangles; and consequently have their Sides proportional.

First COROLLARY.

The Perpendicular A D, in the same Figure, is a middle Proportional, between the Segments of the Base C D and D B, *i. e.* as C D is to D A, so is D A to D B. For the Triangles C A D and D A B, being equal, likewise as C D the lesser Angle of the Triangle C A D is to D A, the greater Angle of the same Triangle, as D A the lesser Side of the Triangle D A B, is to D B the greater Side.

In the same Manner C A is a middle Proportional, between the Hypotenuse C B, and the Segment C D; for the Triangles C A B and C A D being equal, the Hypotenuse C B, in the greater Angle C A B, will be to the lesser Side C A, as the Hypotenuse C A in the lesser Triangle C A D, is to its lesser Side C D.

Lastly B A is a middle Proportional between the Hypotenuse B C and the Segment B D. For the Triangles B A C and B A D being equal, the Hypotenuse B C in the greater Angle B A C, will be to B A the greater Side, as the Hypotenuse B A in the lesser Triangle B A D, is to its greater Side B D.

Note, That *Hypotenuse*, from *υποτεινω*, *subtendo*, I subtend, in *Geometry*, is the longest Side of a right angled Triangle; or that Side which subtends, or is opposite to the right Angle.

Segment, is a Part of a Circle, comprehended between an Arch and the Chord thereof. Or it is Part of a Circle, comprehended between a right Line less than a Semicircle, and a Part of the Circumference.

Second COROLLARY.

The Square of the Perpendicular A D, in the same Figure, is equal to the Rectangle contain'd under the Segments of the Base B D, and D C, because it is a middle Proportional between those Segments. By the same Reason the Square of the Side C A is equal to the Rectangle made of the Base B C, and its Segment C D: Likewise the Square of the Side B A, is equal to the Rectangle comprehended under the Base B C, and its Segment B D.

Fifth THEOREM.

In all rectangle Triangles, the Square of the Base, or Hypotenuse B C, is equal to the Sides of the Squares B A, and A C taken together, fig. 71.

For the Square B M, must be divided into the two Rectangles B E, and C E, by the Production, or carrying on the Perpendicular A D into E. The Triangle B E, being contained under the Base B C, or rather under B N, equal to itself, and under its Segment B D; so that it is equal to the Square of the Triangle B A.

For the same Reason, the Rectangle C E, contain'd under the Base B C, or rather under C M, equal to itself, and under C D, is equal to the Square of the Side A C; and thus the whole Square B M, is equal to the Squares of the Sides B A, and A C, taken together.

SCHOLIUM.

This great and curious *Theorem*, which is the 47th Proposition of *Euclid's Elements*, is attributed to *Pythagoras*, who, according to *Proclus*, *Vitruvius*, and several others, sacrificed to the Muses, because he imagined he had been assisted by them, in the Discovery of this Problem.

Among the different Uses this Problem is of, in the Mathematicks, I'll mark two principal ones, which all Philosophers should be perfectly acquainted with.

For, first, it is demonstrated by it, that there are some Lines which are *incommensurable*, *i. e.* Lines between which no common Measure can be found; or which are not between themselves, as a Number to another Number; for all Numbers have at least Unity for common Measure; from a Repetition whereof, they proceed.

Therefore, let us suppose in the rectangular Triangle A B C, fig. 71. the Side A C to be of three Feet; the Side A B of four Feet; and the Hypotenuse B C, of five Feet: It follows hence, that the Side of the Square A C, *viz.* A H, contains nine square Feet; because the Square of a Line, is made of that Line, being carried into itself, or multiplied in itself. But if three Feet be taken thrice, or multiplied by a ternary Number, they will form nine Feet. Likewise the Square of the Side A B, *viz.* A F, will be of sixteen Feet; and the Square of the Hypotenuse B C, *viz.* B M, will contain twenty-five square Feet. Then if the Square A H, 9, and A F, 16, be added together, they will make 25. Because together they are equal to the Square B M, which comprehends also, twenty-five square Feet. And not only those Squares are expressed by Numbers, but even their Roots, or Sides, can be expressed by Numbers. For all those Numbers, which multiplied by themselves, form a Square, are called the *Roots* or *Sides* of Squares. As 2 is the Root of the Square 4, for 2 taken twice, make up 4; thus 3 is the Root of the Number 9; 4 is the Root of 16; 5 the Root of 25; 6 the Root of 36; 7 the Root of 49; 8 the Root of 64; 9 the Root of 81; 10 the Root of 100, &c. Those Numbers 4, 9, 16, 25, 36, 49, 64, 81, 100, are square, because they arise from certain Numbers carried into themselves, and their Unity can be disposed in a square Form. Thus nine Unities can be disposed in a Square, each Side whereof will contain three Unities. Likewise sixteen Unities can be disposed in a square Form, the Side whereof will consist of four Unities. The same may be said of the following Numbers 25, 36, 49, &c. But if Numbers cannot be disposed in a Square, they are not to be called Squares.

Therefore a Number which is Duple of a square one, cannot be square, because it cannot be disposed in a square Form, *v. gr.* if a quaternary Number be taken twice, it becomes octonary, which is not a Square, because it cannot be disposed in a square Form. But if the quaternary Number be taken four Times, it will produce 16, which is a Square.

But though a square Number cannot be the Duple of another square Number; a Square extended, notwithstanding, can be the Duple of another extended Square. For if the rectangular Triangle was Isosceles, *v. gr.* if both its Legs were of four Feet, the Square of either Leg would be of 16 Feet, and both taken together consist of 32 square Feet; so that the Square of the Hypotenuse of that Triangle would contain 32 Feet, and be the Duple of one another.

The Number 32 is not square, but is contain'd between the square Numbers 25 and 36; whose Roots are 5 and 6, so that the Root of the Number 32, which is the Hypotenuse of the proposed Triangle, and marked thus R 32. must contain more Feet than 5, and less than 6; but the Magnitude of that Number cannot be precisely determined; neither can the Foot, or any Part of the Foot, which measures the Sides, be the common Measure of their Sides, and Hypotenuse. Therefore the Hypotenuse of the rectangle isosceles Triangle, such as the Diagonal of any Square, is *incommensurable*. The *Peripateticians* make Use of this Argument, to prove that the Matter is divisible, *in infinitum*, as we'll see in my Treatise of *Philosophy*.

But there is another Use of this Theorem, which can never be priz'd too much, *viz.* the Construction of the Tables of *Sines*, *Tangents*, and *Secants*; of which Construction I'll give here an Example or Specimen, lest my Pupils should be perfect Strangers to them: Having described the Circle A E D F B C K, fig. 35. and the Radius A B being applied to the Circumference from B

into K, and the Side A K drawn, the Triangle B A K, will be equilateral; and thus all its Angles will be equal between themselves, or each of them will be of 60 Degrees. Therefore the Side or Chord B K, being in two equal Parts, the Arch B C will be of 30 Degrees.

But because the Radius is commonly put of 10000000 Parts, the Chord B K equal to it, will be of so many Parts: Therefore its Half B I, which is the Sine of the Arch B C, will be of 5000000 Parts.

But then in the rectangular Triangle A I B, the Square of the Hypotenuse A B, is equal to the Squares of the Sides A I, and B I, taken together. Therefore let the Square of the Hypotenuse A B, be made by carrying 10000000 into 10000000, it will be 100000000000, then from this Product, take off the Square of the Side B I, viz. 2500000000000, there will remain the Square of the same A I, or of G B, the Sine of the Complement 7500000000000, from which if the Square Root be extracted, we shall have the Line A I of almost 8660254 Parts.

Besides, as the Triangles A B I, and A H C are similar, let it be that as A I to B I, so A C to C H, the Tangent C H should be had. That if the Squares of the Sides A C and C H be added together, we'll have the Square of the Hypotenuse A H; from which if the Root be extracted, then that Hypotenuse A H, which is the Secant of the Arch B C, will appear.

I'll end here, that Part of Geometry, which I call *Speculative*; and pass from it to the *Practical Geometry*.

D E F I N I T I O N S.

ORGYIA, was an antient *Græcian* Measure, containing six of our Feet. Some represent the *Orgyia*, as the *Græcian Pace*. *Hesychius* describes it as the Space comprehended between the two Hands, when the Arms are extended, answering to the *Roman Ulna*, and our Fathom.

The Foot contains twelve Ounces, or Inches; for the one is not only taken for a Weight, in which Sense it is a twelfth Part of a Pound; but likewise for a Measure, in which Sense it is a twelfth Part of a Foot; as a Digit is a sixteenth Part of a Foot. Which, notwithstanding, the Authors of our Time, take indifferently the Inch and Digit, for a twelfth Part of a Foot; so that when it is Question of an Eclipse of the Moon, the Name of *Digit* is taken for a twelfth Part of the apparent Diameter of the Moon. Therefore when it is said that the Eclipse of the Moon is of two or three Digits, it is the same as if it was said, that it is of two or three twelfth Parts of its apparent Diameter.

The Foot consists of twelve Parts, which we call Lines. The Antients had other Measures which are not in Use among us.

The Measures common to the *Romans*, and the *Gauls*, are expressed in the following Verses:

*Quatuor ex granis digitus componitur unus,
Ex quater in palmo digitus; quater in pede palmus.
Quinque pedes passum faciunt; passus quoque Centum.
Viginti quinque, stadium dat, at Miliare
Octo dabunt stadia: duplicatum dat tibi Leucam.*

Note, That by Corn is understood here Barley-Corns placed Length-wise, against one another; and by Paces are understood geometrical Paces, each consisting of three Feet.

Note also, That the Foot is of different Lengths in different Countries. The *Paris Royal* Foot exceeds the *English* by seven Lines and a half; the antient *Roman* Foot of the Capital, consisted of four Palms, equal to eleven Inches, and seven-tenths *English*. The *Rhineland*, or *Leyden* Foot, by which the northern Nations go, is to the *Roman* Foot, as 950 to 1000. The Proportions of the principal Feet of several Nations, compar'd with the *English* and *French*, are here subjoin'd.

The *English* Foot being divided into one thousand Parts, or into twelve Inches, the other Feet will be as follows:

	Th. Pts. F. In. lin.
<i>London</i>	1000 0 12 0.
<i>Paris, the Royal</i>	1068 1 00 8.
<i>Amsterdam</i>	942 0 11 3
<i>Antwerp</i>	946 0 11 2
<i>Dort</i>	1184 0 02 2
<i>Rhineland, or Leyden</i>	1033 1 00 4.
<i>Lorrain</i>	958 0 11 4
<i>Mechlin</i>	919 0 11 0
<i>Middleburg</i>	991 0 11 9.
<i>Straßbourg</i>	920 0 11 0
<i>Bremen</i>	964 0 11 6.
<i>Cologne</i>	954 0 11 4.
<i>Francfort on the Mayne</i>	948 0 11 4.
<i>Spanish</i>	1001 0 11 0
<i>Toledo</i>	899 0 10 7
<i>Roman</i>	967 0 11 6
<i>Bononia</i>	1204 1 02 4
<i>Mantua</i>	1569 1 06 8.
<i>Venice</i>	1162 1 01 9
<i>Dantzick</i>	944 0 11 3
<i>Copenhagen</i>	965 0 11 6
<i>Prague</i>	1026 1 00 3
<i>Riga</i>	1831 1 09 9.
<i>Turin</i>	1062 1 00 7
<i>Greek</i>	1007 1 00 1.
<i>Paris, by Dr. Bernard,</i>	1066 1 00 1.
<i>Old Roman</i>	970 0 00 0.

The *Paris* Foot being supposed to contain 1440 Parts, the rest will be as follows:

<i>Paris</i>	1440.
<i>Rhineland</i>	1391.
<i>Roman</i>	1320.
<i>London</i>	1350
<i>Swedish</i>	1320
<i>Danish</i>	1403
<i>Venetian</i>	1540 $\frac{2}{3}$
<i>Constantinopolitan</i>	3120.
<i>Bononian</i>	1682 $\frac{2}{3}$
<i>Straßbourg</i>	1283 $\frac{3}{4}$
<i>Norimberg</i>	1346 $\frac{1}{2}$
<i>Dantzick</i>	1721 $\frac{1}{2}$
<i>Hall</i>	1320.

First PROBLEM.

In the given Point of the right Line, to form an Angle equal to the other given.

Let B of the Line A B, fig. 72. be the Point in which is to be formed the Angle, equal to the given Angle C D E, fig. 73.

From the Point D must be described the Arch C E, then the same Aperture remaining, the Arch H G must be made from the Point B, from which must be cut the Arch H F, equal to the Arch C E, and the Line B F drawn; then the Angle A B F, will be equal to the Angle C D E, because those two Angles are measur'd by the same Arch.

Second PROBLEM.

To draw a Perpendicular from the Point given in a Line.

Let the Point C be given in the Line A B, fig. 74. from which is taken on each Side the equal Parts C D, C E; and from the Points D and E be describ'd Arches, cutting each other in the Point I; then from the Point C, through the Point I, let the Line C O be drawn, which will be the Perpendicular requir'd. Because the Point I, does not incline more towards the Part D A, than towards the Part E B, and Vicissim.

Third PROBLEM.

From the Point given without a Line, to carry a Perpendicular to that Line.

Let C, fig. 75. be the Point given, from which is described the Arch D E, cutting the Line A in the Points D and E; from these Points D and E, let two Arches be made, cutting one another in the Point F; and the Line C F be drawn to cut the Line A B in O; then the